

Consolidated Case Nos. 11-73342 and 11-73356

IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

SIERRA CLUB, CENTER FOR BIOLOGICAL DIVERSITY,
GREENACTION FOR HEALTH AND ENVIRONMENTAL JUSTICE,
and
EL PUEBLO PARA EL AIRE Y AGUA LIMPIO,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,

Respondents,

and

AVENAL POWER CENTER, LLC,

Respondent-Intervenor.

PETITIONERS' EXCERPTS OF RECORD

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INDEX TO PETITIONERS' EXCERPTS OF RECORD

Description	PER
76 Fed. Reg. 55,799 (Sept. 9, 2011) ("Approval of Clean Air Act Prevention of Significant Deterioration Permit Issued to Avenal Power Center, LLC To Construct the Avenal Energy Project")	000001
Petitioners' Comments re Proposed Prevention of Significant Deterioration Permit for the Avenal Energy Project (PSD Permit No. SJ 08-01) (Oct. 15, 2009)	000002
Memo from Stephen D. Page, Director, OAQPS, EPA, to EPA Regional Air Division Directors (Apr. 1, 2010)	000021
Petitioners' Comments re Short-term NO ₂ NAAQS and the Proposed Prevention of Significant Deterioration Permit for the Avenal Energy Project (PSD Permit No. SJ 08-01) (Apr. 21, 2010)	000025
Letter from EPA Region 9 to Avenal Power Re Supplemental NO ₂ Air Quality Impact Analysis (Aug. 12, 2010)	000028
Memo. in Support of Avenal Power's Motion for Judgment on the Pleadings Pursuant to Rule 12(c) and Request for Expedited Decision, Case No. 1:10-cv-00383 (RJL) (Aug. 25, 2010)	000030
Memo. in Opp. to Pls.' Motion for Judgment on the Pleadings and in Support of Defs.' Cross-Mot. for Summ. J., Case No. 1:10-cv-00383 (RJL) (Sept. 17, 2010)	000033
Decl. of Deborah Jordan, Case No. 1:10-cv-00383 (RJL) (Sept. 17, 2010)	000036
Decl. of Regina McCarthy, Case No. 1:10-cv-00383 (RJL) (Jan. 31, 2011)	000039
Memorandum from Lisa P. Jackson to Gina McCarthy (Mar. 1, 2011)	000043
EPA, Supplemental Statement of Basis, PSD Permit Application for Avenal Energy Project (Mar. 4, 2011)	000044
Petitioners' Comments re Supplemental Statement of Basis: PSD Permit Application for Avenal Energy Project (Apr. 12, 2011)	000086
Memorandum Opinion, Case No. 1:10-cv-00383 (RJL) (May 26, 2011)	000110
EPA, Prevention of Significant Deterioration Permit Issued Pursuant to the Requirements at 40 CFR § 52.21 (May 27, 2011)	000114

INDEX TO PETITIONERS' EXCERPTS OF RECORD

Description	PER
EPA, Responses to Public Comments on the Proposed Prevention of Significant Deterioration Permit for the Avenal Energy Project (May 27, 2011)	000116

POSTAL SERVICE

39 CFR Part 20

Outbound International Mailings of Lithium Batteries

AGENCY: Postal Service™.

ACTION: Final rule; withdrawal.

SUMMARY: The Postal Service is withdrawing a final rule that would incorporate new maximum limits for the outbound mailing of lithium batteries to international, or APO, FPO or DPO locations. The Postal Service also withdraws the corresponding *Code of Federal Regulations* revision to reflect these new limits.

DATES: The final rule published on August 25, 2011 (76 FR 53056–56057), is withdrawn effective September 9, 2011.

FOR FURTHER INFORMATION CONTACT: Rick Klutts at 813–877–0372.

SUPPLEMENTARY INFORMATION: In a final rule with comment period published in the *Federal Register* on August 25, 2011, the Postal Service provided new maximum limits for mailpieces containing equipment with lithium metal or lithium-ion batteries that were to be effective October 3, 2011. These revisions were consistent with recent amendments to the Universal Postal Union (UPU) Convention and regulations as announced in International Bureau Circulars 114 and 115, dated June 14, 2011, that affected UPU Convention Articles 15 and 16, Article RL 131 of the letter post regulations, and Article RC 120 of the parcel post regulations.

The withdrawal of the revisions is necessary because of a notice to the UPU from the International Civil Aviation Organization (ICAO) on August 19, 2011, requesting that the UPU delay implementation of the aforementioned amendment until the UPU revisions could be reviewed by the ICAO Dangerous Goods Panel, and if approved, incorporated into *The Technical Instructions for the Safe Transport of Dangerous Goods by Air* manual. Therefore, the UPU has informed its member countries that the date of newly adopted UPU amendments for lithium batteries will be the subject of further notice based on the decision of the panel and any changes to the ICAO *Technical Instructions*.

Accordingly, the Postal Service withdraws its final rule published on August 25, 2011. The Postal Service also withdraws the revision to 39 CFR 20.1 whereby a new section 135.6 was added to the *Mailing Standards of the United*

States Postal Service, International Mail Manual (IMM®) to describe the new maximum limits for the outbound mailing of lithium batteries to international, or APO, FPO or DPO locations. The parallel changes that were to be made to other USPS publications are also withdrawn.

Stanley F. Mires,

Chief Counsel, Legislative.

[FR Doc. 2011–23054 Filed 9–8–11; 8:45 am]

BILLING CODE 7710–12–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[FRL–9460–3]

Approval of Clean Air Act Prevention of Significant Deterioration Permit Issued to Avenal Power Center, LLC To Construct the Avenal Energy Project

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Action.

SUMMARY: This document announces that EPA has issued a final permit decision granting the Clean Air Act Prevention of Significant Deterioration (PSD) permit application submitted by Avenal Power Center, LLC to authorize construction of the Avenal Energy Project.

DATES: The EPA's PSD permit for the Avenal Energy Project became effective and final agency action on August 18, 2011, when administrative review procedures were exhausted. Pursuant to section 307(b)(1) of the Clean Air Act, 42 U.S.C. 7607(b)(1), judicial review of this permit decision, to the extent it is available, may be sought by filing a petition for review in the United States Court of Appeals for the Ninth Circuit within 60 days of September 9, 2011.

ADDRESSES: The documents relevant to the above-referenced action are available for public inspection during normal business hours at the following address: U.S. Environmental Protection Agency, Region 9, 75 Hawthorne St., San Francisco, CA 94105. To arrange for viewing of these documents, call Shirley Rivera at (415) 972–3966.

FOR FURTHER INFORMATION CONTACT: Shirley Rivera, Air Division, U.S. Environmental Protection Agency, Region 9, 75 Hawthorne St., San Francisco, CA 94105. The EPA Environmental Appeals Board (EAB) decision described below is available at the following Web site: <http://www.epa.gov/eab/>.

SUPPLEMENTARY INFORMATION: The EPA issued a PSD permit on May 27, 2011, to Avenal Power Center, LLC for the Avenal Energy Project, granting approval to construct a new 600-megawatt natural gas-fired combined-cycle power plant in Kings County, California. The EPA issued an administrative amendment to the permit on June 21, 2011, to correct typographical errors. The EPA's Environmental Appeals Board (EAB) received four petitions for review of the permit from the following entities within 30 days of the EPA's service of notice of the issuance of the permit: (1) El Pueblo Para El Aire y Agua Limpio; (2) Greenaction for Health & Environmental Justice; (3) Sierra Club and Center for Biological Diversity; and (4) Mr. Rob Simpson. The EAB denied review of these petitions on August 18, 2011. All conditions of the Avenal Power Center, LLC permit for the Avenal Energy Project, as amended on June 21, 2011, are final and effective. Pursuant to 40 CFR 124.19(f)(1), final agency action by EPA has occurred because of the exhaustion of the agency review procedures before the EAB. The EPA Administrator has delegated authority to the EAB to issue final decisions in PSD permit appeals filed under 40 CFR part 124. 40 CFR 124.2(a).

Dated: August 31, 2011.

Gina McCarthy,

Assistant Administrator, Office of Air and Radiation.

[FR Doc. 2011–22834 Filed 9–8–11; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2011–0639; FRL–8886–8]

Mandipropamid; Pesticide Tolerances for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes time-limited tolerances for residues of mandipropamid in or on basil, fresh and basil, dried. This action is in response to EPA's granting of an emergency exemption under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizing use of the pesticide on basil. This regulation establishes a maximum permissible level for residues of mandipropamid in or on these commodities. The time-limited tolerances expire on December 31, 2012.

PER 000001

**EARTHJUSTICE**ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

October 15, 2009

VIA ELECTRONIC MAIL

Ms. Shirley Rivera (AIR-3)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Proposed Prevention of Significant Deterioration Permit for the Avenal Energy Project
(PSD Permit No. SJ 08-01)

Dear Ms. Rivera:

These comments are submitted on behalf of the Tehipite Chapter of the Sierra Club to oppose issuance of the prevention of significant deterioration ("PSD") permit proposed by EPA for the Avenal Energy Project in Kings County, California. The proposed permit fails to impose emission limits representing the best available control technology ("BACT") for all pollutants subject to regulation, and fails to demonstrate that this massive new pollution source will not cause or contribute to violations of any national ambient air quality standards in one of the worst-polluted regions in the country.

I. The Proposed Permit Fails to Address BACT for Carbon Dioxide ("CO₂")

Commenters find it stunning that the proposed permit does not even mention CO₂ emissions or controls. EPA is well aware that the Environmental Appeals Board ("EAB") has returned multiple PSD permits for failing to consider whether CO₂ is a pollutant "subject to regulation" under the Clean Air Act. *See In re Deseret Power Elec. Coop.*, PSD Appeal No. 07-03 (EAB Nov. 13, 2008); *In re Northern Mich. University Ripley Heating Plant*, PSD Appeal No. 08-02 (EAB Feb. 18, 2009). In light of these decisions, EPA Region 9 also withdrew portions of the PSD Permit issued to Desert Rock Energy Company in order to reconsider the issue of whether CO₂ is a pollutant subject to regulation. Yet EPA proposes a PSD permit for another power plant that will emit over 1.7 million tons of CO₂ each year¹ without any discussion of these contentious issues whatsoever. EPA must revise the proposed permit to explain EPA's position on BACT for CO₂ so that the public can comment on the control levels selected or EPA's rationale for refusing to impose such controls.²

¹ See "Avenal Energy Application for Certification," at 6.2-85 (reporting annual CO₂ emissions of 1.71 million metric tons per year).

² For example, commenters should be informed if EPA's decision not to address controls for CO₂ is based on the memo from former EPA Administrator Stephen Johnson entitled "EPA's Interpretation of

Letter to Ms. Shirley Rivera

October 15, 2009

Page 2 of 19

While commenters believe EPA should be well informed of the legal and technical issues surrounding the control of CO₂, commenters nonetheless provide the following summary.

1. The Clean Air Act Requires BACT for all Pollutants Subject to Regulation Under the Act.

The Clean Air Act defines BACT as an emission limitation based on the maximum degree of reduction of *each pollutant subject to regulation under this Act.*" CAA § 169(3) (emphasis added). Thus, a BACT analysis for carbon dioxide must be completed if: (1) carbon dioxide is a "pollutant"; and (2) if it is "subject to regulation" under the Act.

a. Carbon Dioxide is a Clean Air Act "Pollutant"

The Supreme Court of the United States has held unequivocally that carbon dioxide is a "pollutant" as that term is used in the Act. *See Massachusetts v. EPA*, 549 U.S. 497, 528-29 (2007). In *Massachusetts*, "a group of States, local governments, and private organizations," including the Sierra Club, challenged EPA's contention that it lacked authority under the Clean Air Act to regulate greenhouse gas pollution, including carbon dioxide emissions, from motor vehicles. *Id.* at 504. The Court sided with challengers, ruling that "greenhouse gases fit well within the Clean Air Act's capacious definition of 'air pollutant.'" *Id.* at 532.

b. Carbon Dioxide is "Subject to Regulation"

Congress first enacted the PSD program (and the BACT requirements) as part of the 1977 Clean Air Act Amendments. One year later, EPA finalized its first regulations governing the PSD permitting process. In the preamble to those regulations, EPA stated:

Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program" (Dec. 18, 2008). This memo was issued in violation of the procedural requirements of the Administrative Procedure Act and conflicts with the plain language of the Clean Air Act. As a result, Administrator Jackson granted a petition for reconsideration on February 17, 2009 noting that the Johnson memo does not represent the "final word on the appropriate interpretation of Clean Air Act requirements." *See* Letter from Administrator Jackson, EPA, to David Bookbinder, Sierra Club (Feb. 17, 2009). EPA is in the process of formal rulemaking to resolve the meaning of the phrase "subject to regulation." *See* 74 Fed. Reg. 51535 (Oct. 7, 2009). If EPA Region 9 now contends that the Johnson memo does represent the "final word" without further discussion, commenters need to be made aware of this claim so that the appropriate record of responses can be prepared.

PER 000003

Letter to Ms. Shirley Rivera

October 15, 2009

Page 3 of 19

Some questions have been raised regarding what “subject to regulation under this Act” means relative to BACT determinations. . . . “[S]ubject to regulation under this Act” means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type.

43 Fed. Reg. 16388, 16397 (June 19, 1978) (*hereinafter* the “1978 Preamble”).

As EPA is aware, there are multiple examples of regulations in 40 CFR Subchapter C that specifically apply to CO₂. Attachment A hereto includes a list of the hundreds of federal regulations that address CO₂ in one way or another. This section highlights two of these.

Section 821(a) of the 1990 Clean Air Act Amendments provides:

Monitoring. – [EPA] . . . shall promulgate regulations within 18 months after the enactment of the Clean Air Act Amendments of 1990 to require that all affected sources subject to Title [IV] of the Clean Air Act shall also monitor carbon dioxide emissions The regulations shall require that such data be reported to the Administrator.

See 42 U.S.C. § 7651k note; Pub. L. 101-549; 104 Stat. 2699. In 1993, when EPA promulgated the regulations implementing this carbon dioxide monitoring and reporting program, it did so by amending Subchapter C of Title 40 of the Code of Federal Regulations. *See* 40 C.F.R. §§ 75.1(b), 75.10(a)(3), 75.33, 75.57, 75.60-64. The EAB recently confirmed that, based on this example, “the 1978 Federal Register Notice augers in favor of a finding that” CO₂ *is* subject to regulation under the Act. *Deseret*, PSD Appeal No. 07-03, slip op. at 41.

As EPA is also aware, on April 29, 2008, the Agency approved a state implementation plan revision for Delaware establishing federally enforceable emission limits for CO₂. *See* 73 Fed. Reg. 23101. EPA’s approval notice stated that EPA was approving the CO₂ emission limits for new and existing generators “in accordance with” and “under” the Clean Air Act. *See id.*; 73 Fed. Reg. 11845 (Mar. 5, 2008). EPA’s approval made these CO₂ control requirements enforceable under the Act. *See* CAA §§ 113, 304(a)(1) and (f)(3). These revisions to the state implementation plan appear in the regulations codified in Subchapter C of Title 40 of the Code of Regulations. *See* 40 CFR § 52.420

PER 000004

Letter to Ms. Shirley Rivera

October 15, 2009

Page 4 of 19

(2009). Accordingly, these regulations are also within the scope of the 1978 Preamble interpretation of “subject to regulation.”

EPA in *Deseret* argued that “EPA does not currently have the authority to address the challenge of global climate change by imposing limitations on emissions of CO₂ and other greenhouse gases in PSD permits.” *Deseret*, PSD Appeal No. 07-03, slip op. at 16 (internal quotation marks omitted). The EAB rejected this rationale as “clearly erroneous.” *Id.* at 9. It then rejected EPA’s BACT decision and remanded the permit to EPA. *Id.* at 63. The EAB recently reaffirmed this decision. See *Northern Mich. U.*, PSD Appeal No. 08-02, slip op. at 31 (instructing the state agency on remand to be “guided by our findings in *Deseret*, to undertake the same consideration whether the CAA’s ‘pollutant subject to regulation’ language requires application of a BACT limit to CO₂ emissions”).

While the EAB in *Deseret* found that the Clean Air Act is ambiguous and allows room for agency interpretation, it was careful to warn that the agency’s discretion was not unbounded. It advised that construing the Act to require BACT for CO₂ is not only plausible, but is also supported by the only regulatory history that speaks directly to the meaning of “subject to regulation.” *Deseret*, PSD Appeal No. 07-03, slip op. at 38-42.

EPA’s silence on the issue in the proposed Statement of Basis provides nothing to support its apparent decision to ignore CO₂ controls. This approach is inconsistent with the EAB’s directives following remand of the *Deseret* and Northern Michigan University permits. It also denies commenters the ability to meaningfully review and comment on the proposed permitting decisions. The failure to address the legal status of CO₂ control is consequential for approval of this permit because the proposed permit does not otherwise ensure that CO₂ will be subject to BACT.

2. The Proposed Avenal Project Is Not Subject to BACT for CO₂

EPA’s BACT analysis makes no mention of CO₂. The proposed PSD permit for Avenal includes no conditions that limit or otherwise control CO₂ emissions. If EPA had conducted any analysis, it could not have approved this project as meeting the BACT requirement for CO₂.

A proper BACT analysis should have explored the full range of alternatives available to reduce CO₂ emissions from the proposed project. These should have included energy production alternatives that do not rely on fossil fuel combustion, hybrid technologies

Letter to Ms. Shirley Rivera

October 15, 2009

Page 5 of 19

that combine energy sources to improve the overall carbon efficiency of the power plant,³ requiring co-generation with the project, and changes to the project design that would lower total carbon emissions (e.g., elimination of supplemental duct burners for the heat recovery steam generators, or replacement of those burners with a more efficient microturbine or solar energy collection system⁴). At a minimum, the analysis should have explored opportunities for improved turbine efficiency. For an example of what this analysis should look like, commenters have attached the Additional Statement of Basis for the Russell City Energy Center prepared by the Bay Area Air Quality Management District, which is the delegated federal PSD permitting agency for the San Francisco Bay Area. BAAQMD, "Additional Statement of Basis -- Russell City Energy Center," at 21 (Aug. 3, 2009) (Attachment B, hereto).⁵

The California Energy Commission has reported that the proposed Avenal project will have an overall project fuel efficiency of 50.5 percent lower heating value. CEC, "Final Staff Assessment," at 5.3-1 (June 2009). This is a terribly inefficient combined-cycle facility that comes nowhere close to utilizing the best available technology to limit the emissions of CO₂. In the early Russell City Energy Center review, the Bay Area Air Quality Management District noted an old 2002 analysis prepared by the CEC that looked at three turbines and found efficiencies between 55.8 and 56.5 percent. *See* BAAQMD, "Statement of Basis for Russell City Energy Center," at 64 n.66 (Dec. 8, 2008). Upon further review, the Bay Area Air Quality Management District found that a gross efficiency of 56.45 percent lower heating value was achievable and required for the Russell City Energy Center. BAAQMD, "Additional Statement of Basis for Russell City Energy Center," at 21.

EPA's analysis should also consider emerging technology that promises efficiencies of between 58 and 60 percent. Of particular note is General Electric's H system turbines, which can reportedly achieve greater than 60 percent efficiency. *See* www.gepower.com.

³ *See, e.g.*, <http://www.energy.ca.gov/sitingcases/victorville2/index.html> (Victorville 2); <http://www.reuters.com/article/environmentNews/idUSN1139875020080612> (PG&E Coalinga project); http://my.epri.com/portal/server.pt/gateway/PTARGS_0_237_317_205_776_43/http://uspalecp604;7087/publishedcontent/publish/epri_to_evaluate_adding_solar_thermal_energy_to_fossil_power_plants_da_609034.html (EPRI projects).

⁴ *See, e.g.*, <http://appft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PG01&p=1&u=/netahtml/PTO/srchnum.html&r=1&f=G&l=50&s1='20080127647'.PGNR.&OS=DN/20080127647&RS=DN/20080127647> (application for patent on solar energy system to supplement thermal energy for heat recovery steam generators).

⁵ By referencing the Russell City analysis, commenters do not mean to suggest that the analysis is without fault. But the analysis should serve as a useful starting point for EPA.

Letter to Ms. Shirley Rivera

October 15, 2009

Page 6 of 19

com/prod_serv/products/gas_turbines_cc/h_system/index.htm. These turbines have been in operation in Balgan Bay, Wales since 2003 and at the Tokyo Electric Power Company's Futtsu Thermal Power Station in Japan since 2007. *See* Attachment C, hereto. These turbines have also been proposed for use at the Inland Empire Energy Center here in California. *Id.*⁶

Once EPA determines the efficiency that represents best available control technology, EPA must translate that performance into enforceable limits on CO₂ emissions. Again, the Russell City Energy Center analysis provides a useful example of how this can be accomplished. *See* BAAQMD, "Additional Statement of Basis for Russell City Energy Center," at 24-26 (using heat input per kilowatt-hour). The BACT determination for Russell City Energy Center equates to CO₂ emissions of roughly 900 pounds of CO₂ per megawatt-hour of energy produced.⁷ A review of permitting decisions for other sources suggests that even lower levels are achievable. For example, the Carlsbad Energy Project, which is a retrofit of a peaking power plant (i.e., presumably less efficient than a new baseload plant), will emit 891 pounds of CO₂ per megawatt-hour (.405 mt CO₂/MW-hr). *See* Preliminary Staff Assessment, Carlsbad Energy Center Project (07-AFC-6) (CEC-700-2008-014-PSA) at 4.1-102 (Dec. 11, 2008).

EPA must revise the statement of basis to include an analysis of CO₂ emissions and controls. The proposed project comes nowhere close to achieving the emission levels of CO₂ that could be achieved using BACT.

II. The Proposed Permit Fails to Fully Analyze BACT for Oxides of Nitrogen ("NO_x"), Carbon Monoxide ("CO") or Coarse Particulate Matter ("PM₁₀")

The Clean Air Act requires that the proposed facility be subject to the best available control technology for each pollutant subject to regulation that results from the facility. CAA § 165(a)(4). The Act defines "best available control technology" as "the maximum degree of reduction of each pollutant . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility" *Id.* § 169(3). EPA's guidance provided in the New Source Review Workshop Manual (draft Oct. 1990) outlines the

⁶ Westinghouse has also introduced its advanced turbine system (ATS) program with preliminary results demonstrating efficiencies over 60 percent. *See* Attachment D.

⁷ Emissions will depend on the carbon content of the natural gas fuel. *See* BAAQMD, "Additional Statement of Basis for Russell City Energy Center," at 29 n.49 (reporting varying emission factors).

Letter to Ms. Shirley Rivera

October 15, 2009

Page 7 of 19

analytical steps typically followed to make this case-by-case determination. *See Northern Mich. U.*, PSD Appeal No. 08-02, slip op. at 12.

Nowhere in the Statement of Basis for the proposed Avenal project does EPA provide anything resembling a top-down analysis. Instead EPA appears to apply a cookie-cutter review of old permit levels to justify limits proposed with no analysis by the source or the San Joaquin Valley Unified Air Pollution Control District. This approach is particularly troubling for CO.

The proposed permit concludes that BACT for CO is met by a limit of 2.0 parts per million by volume on a dry basis (ppmvd) over a 1-hour averaging period. Avenal Statement of Basis, at 18. This conclusion is based on a review of permitting levels for other sources using similar oxidation catalyst control technology. *Id.*

The first problem with EPA's analysis is that it is incomplete. At least two facilities have recently been permitted with CO emission levels below 2.0 ppmvd: Kleen Energy Systems in Connecticut (0.9 to 1.7 ppmvd)⁸ and CPV Warren in Virginia (1.3 and 1.8 ppmvd without duct burning).⁹ At a minimum, EPA's analysis should have started with these levels as the top level of control for the analysis. *See* NSR Manual at B.24 (“[W]hen reviewing a control technology with a wide range of emission performance levels, it is presumed that the source can achieve the same emission reduction level as another source unless the applicant demonstrates that there are source-specific factors or other relevant information that provide a technical, economic, energy or environmental justification to do otherwise.”).

Based on these lower permit levels, the Bay Area Air Quality Management District analyzed the costs and emission reduction benefits of installing a larger oxidation catalyst capable of consistently maintaining CO emissions below 1.5 ppmvd for the Russell City Energy Center. *See* BAAQMD, “Additional Statement of Basis for Russell City Energy Center,” at 48. The District found that such levels could be achieved at a cost-effectiveness of \$4500 per ton of CO reduced. *Id.* This level of CO cost-effectiveness is consistent with the BACT cost-effectiveness levels found in a 2002 survey prepared for the Air and Waste Management Associations. *See* Hydari, N., et al., “Comparison of the Most Recent BACT/LAER Determinations for Combustion Turbines

⁸ Connecticut Dept. of Env'tl Protection, Bureau of Air Mgmt, “New Source Review Permit to Construct and Operate a Stationary Source, issued to Kleen Energy Systems, LLC” (Feb. 25, 2008).

⁹ Virginia Dept. Env'tl Quality, “Prevention of Significant Deterioration Permit – CPV Warren, LLC,” (July 30, 2004) (Attachment E hereto).

Letter to Ms. Shirley Rivera

October 15, 2009

Page 8 of 19

for State Air Pollution Control Agencies,” Table 7 (2002) (Attachment F, hereto). That analysis found that the *average* (i.e., some of the permits had higher cost-effectiveness numbers and some had lower) cost-effectiveness of CO controls required in Arkansas was \$3,373 per ton and in Michigan was \$4,944 per ton. *See id.*; *see also* Letter from Steven Riva, Chief, Permitting Section, Region 2, EPA, to Robert Ewing, Project Manager, NYDEC, at 2-3 (Sept. 27, 2000) (concluding for the Sithe Heritage Station Generating Facility, in Scriba, New York that \$3,412 per ton would be an acceptable cost for CO controls but that an option that would result in costs “well over \$6,000 per ton” would not be BACT) (available at: <http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/sithe.pdf>).

EPA cannot simply rule out CO limits below 2.0 ppmvd without providing an analysis on the record of the feasibility and cost-effectiveness of improved performance. EPA must provide the missing top-down analysis for each of the pollutants subject to BACT.

The more fundamental problem with EPA’s analysis, *which infects the analysis of each of the pollutants analyzed in the Statement of Basis*, is that a simple review of permitted levels is not a substitute for a BACT analysis. EPA’s analysis fails to consider the range of control options available for the proposed source. As noted above, higher efficiency turbine options are available but have never been considered. Improved efficiency coupled with proposed controls would lower overall emissions, including CO. Moreover, alternatives to the supplemental duct-firing to produce peak power should also have been explored as this duct firing is extremely inefficient and significantly increases CO and NO_x emission rates. *See* “Avenal Energy Application for Certification,” at 6.2-43, Table 6.2-20.

By relying only on permit limits without exploring the effectiveness of the required controls themselves, EPA’s analysis fails to provide a ranking of the control methods used to achieve these reported permit limits. *See* NSR Manual at B.6-7. EPA should have considered the inlet concentrations at these sources to determine (and rank) the removal effectiveness at the various sources. In addition, EPA should have reviewed not just permit limits, but actual emissions data from sources. *See* NSR Manual at B.23 (noting “the applicant should use the most recent regulatory decisions *and performance data* for identifying the emission performance level(s) to be evaluated in all cases.”) (emphasis added). Using this data, EPA should have then applied the top-ranked control effectiveness (e.g., 98 percent pollutant removal) to the best achievable turbine efficiency performance level (as noted above) to determine the top-ranked BACT level of control.

PER 000009

Letter to Ms. Shirley Rivera

October 15, 2009

Page 9 of 19

Without a proper top-down BACT analysis, there is no basis for concluding that the Avenal project cannot achieve lower emissions. At a minimum, for CO, other sources have received lower permit limits and a rough analysis prepared by the Bay Area Air Quality Management District for a similar source suggests that such limits may be within an acceptable cost-effectiveness range. EPA must prepare the missing analysis and explain why those results are or are not reasonable as BACT.

III. The Proposed Permit Fails to Demonstrate that the Avenal Project Will Not Cause or Contribute to Violations of National Ambient Air Quality Standards for Ozone and Fine Particulate Matter.

Clean Air Act section 165(a)(3) provides that a PSD permit may not be issued unless the facility proponent “*demonstrates . . . that emissions from the construction or operation of such facility will not cause, or contribute to, air pollution in excess of any . . . national ambient air quality standard in any air quality control region . . .*” (emphasis added); *see also* 40 CFR § 52.21(k)(1). The federal regulations require that the application for a PSD permit contain an analysis of ambient air quality in the area that the major source would affect for each pollutant emitted from the source in significant amounts. *Id.* § 52.21(m)(1)(a). The thresholds for determining whether emissions will be “significant” are provided in section 52.21(b)(23)(i) of the federal regulations. The threshold for PM_{2.5} emissions is 10 tons per year and for NO_x, as a precursor to both PM_{2.5} and ozone, is 40 tons per year. *Id.* § 52.21(b)(23)(i).

The proposed Avenal project will result in emissions of 80.7 tons per year of PM_{2.5} and 144.3 tons per year of NO_x. *See* “Avenal Energy Application for Certification,” at 6.2-45, Table 6.2-24. Yet nowhere in the proposed PSD permit nor the facility’s air quality analysis of its Application for Certification, is there any analysis of the impact the facility will have on ambient concentrations of ozone or PM_{2.5}.

Commenters are aware of the exemption provided in 40 CFR 52.21(i)(2), which waives regulatory source impact analysis and air quality analysis requirements with respect to pollutants for which the area is designated nonattainment. This exemption, however, does not excuse the failures here. While the regulatory requirements as to how to make the required demonstration may be waived, this exemption cannot waive the statutory requirement to make the demonstration at all. Such an application of this regulatory requirement would be a clear violation of the statute. Thus, even if, as a result of this exemption, EPA’s rules are silent as to how this demonstration must be made, the Act

Letter to Ms. Shirley Rivera

October 15, 2009

Page 10 of 19

still requires a demonstration that the source will not cause or contribute to a violation of “any” NAAQS. Moreover, with respect to the regulatory requirements, EPA has only just designated the San Joaquin Valley with respect to the 24-hour 35 $\mu\text{g}/\text{m}^3$ standard for PM_{2.5} and has not yet designated the Valley for the 75 parts per billion (“ppb”) standard for ozone. Thus to the extent there is any rationale behind the regulatory exemption, it is not present here because the area does not have plans for meeting these new standards that will assure that any growth in emissions is consistent with attainment. Nor, as will be discussed in more detail below, can EPA rely on the San Joaquin Valley Unified Air Pollution Control District’s dysfunctional nonattainment new source review program to fully offset these emissions. EPA cannot ignore the air pollution disaster in the San Joaquin Valley and approve this major new source without ensuring that it will not exacerbate the problems in the area.

A. The Applicant’s Air Quality Analysis is Defective

In its Application for Certification, the project proponents report the results of their air quality analysis claiming “[t]hese analyses are designed to confirm that the proposed project’s design features lead to less-than-significant impacts” even under conservative assumptions regarding emissions and other conditions. “Avenal Energy Application for Certification,” at 6.2-40. The analysis, however, fails to meet this stated objective.

At the outset, there is no discussion of ambient ozone impacts whatsoever. The air quality analysis reports that 3-year average 8-hour ozone concentrations measured at the nearby Hanford monitoring site consistently exceed the 75 ppb standard. See “Avenal Energy Application for Certification” at 6.2-8 (reporting average concentrations of 95 ppb for 2004, 88 ppb for 2005 and 86 ppb for 2006). The analysis states that “ambient air quality measurements recorded at the monitoring stations are believed to represent area-wide ambient conditions rather than the localized impacts of any particular facility.” *Id.* at 6.2-7. The analysis includes no other relevant discussion as to how the significant NO_x emissions from the Avenal plant will or will not contribute to the ozone problem in the area. EPA’s proposed Statement of Basis offers nothing more. The analysis does not claim that the impact will be insignificant or completely offset; the analysis is simply silent with respect to ozone impacts. Commenters cannot meaningfully comment on how this proposed project fulfills the requirement of section 165(a)(3) when there is no demonstration to review.

Letter to Ms. Shirley Rivera

October 15, 2009

Page 11 of 19

Avenal's analysis does purport to address PM_{2.5}¹⁰ but is fatally flawed. The analysis notes that emissions from the project will contribute to violations of state and national standards for PM₁₀ and PM_{2.5} but adds that "[f]or these pollutants, existing concentrations already exceed the state and federal standards." "Avenal Energy Application for Certification," at 6.2-65. The project proponent appears to conclude that this is not a problem for permitting because "the project contribution of PM₁₀ is less than the significant impact levels" provided in 40 CFR § 51.165(b). *Id.* at 6.2-72.

Section 51.165(b)(2) provides: "A major source or major modification will be considered to cause or contribute to a violation of a national ambient air quality standard when such source or modification would, at a minimum, exceed the following significance levels at any locality that does not or would not meet the applicable national standard." The section then defines the significant impact levels ("SILs") for PM₁₀ as 1 µg/m³ for the impact on annual concentrations and 5 µg/m³ for the impact on 24-hour concentrations.

Avenal's conclusion that the impacts will not be significant is based on its modeling conclusions that maximum particulate matter impacts will be 0.8 µg/m³ annually and 2.9 µg/m³ for 24-hour concentrations. *See* "Avenal Energy Application for Certification," at 6.2-68, Table 6.2-34. These levels are below the significant impact levels promulgated for PM₁₀.

The first problem with this conclusion is that the significant impact levels used are not relevant to, or appropriate for, PM_{2.5}. To date, EPA has not promulgated similar *de minimis* thresholds for PM_{2.5}. Avenal's comparison of modeled PM_{2.5} concentrations¹¹ to the PM₁₀ levels is irrelevant for purposes of demonstrating that the source will not cause or contribute to a violation of the PM_{2.5} standards. Avenal appears to be operating under the mistaken belief that PM₁₀ can be used as a surrogate for determining compliance with section 165(a)(3). *See* "Avenal Energy Application for

¹⁰ The "Air Dispersion and Modeling Health Risk Assessment Protocol" prepared by Sierra Research stated that the analysis of PM_{2.5} ambient impacts would be conducted "for non-PSD purposes." Sierra Research, "Air Dispersion and Modeling Health Risk Assessment Protocol – Avenal Energy Project," at 3, Table 1 n. c, and 6 (Aug. 2007) (included in "Avenal Energy Application for Certification" Appendix 6.2). This qualification is not repeated in the air quality section of the Application for Certification, so commenters will assume Avenal believes it did attempt to address the requirements of Clean Air Act section 165(a)(3) with respect to the national standards for PM_{2.5}.

¹¹ Avenal's reported particulate matter concentrations are assumed to be PM_{2.5} concentrations because all particulate matter emissions are assumed to be PM_{2.5} emissions. *See* "Avenal Energy Center Application for Certification," at 6.2-43, Table 6.2-19 n. b, Table 6.2-20 n. a, and Table 6.2-21 n. a.

Letter to Ms. Shirley Rivera

October 15, 2009

Page 12 of 19

Certification,” at 6.2-34, Table 6.2-14 n. c (noting EPA guidance “provides that compliance with the federal PM_{2.5} NAAQS should be evaluated using the PM₁₀ NAAQS and not modeled directly.”). The use of the PM₁₀ surrogate policy, to which Avenal seems to be referring, was available to PSD permit applications submitted before July 15, 2008. *See* 40 CFR § 52.21(b)(50)(xi). This illegal grandfathering exemption, however, is no longer available and has been stayed pending EPA rulemaking to revoke this exemption. *See* 74 Fed. Reg. 48153 (Sept. 22, 2009).

In the absence of a promulgated significant impact level that affords a *de minimis* exemption for purposes of evaluating the ambient PM_{2.5} contribution of sources, EPA has been clear that there is no *de minimis* exemption. *See* EPA, “Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers in Diameter (PM_{2.5}): Response to Comments” at 82 (Mar. 2008). Should a permitting agency wish to establish its own *de minimis* contribution thresholds, EPA has advised that they “are not precluded from developing and applying their own SILs for PM_{2.5} in the interim and demonstrating that a cumulative analysis would yield trivial gain.” *Id.* Notwithstanding this direction, neither EPA nor Avenal has proposed any such PM_{2.5} SIL, let alone made any demonstration that such contributions would be trivial. Avenal used the PM₁₀ SIL thinking that it could rely on the surrogate policy. It did not try to suggest that the same SIL was a reasonable *de minimis* threshold for the lower PM_{2.5} standards.

The concept of a SIL is grounded in the *de minimis* principles described by the court in *Alabama Power Co. v. Costle*, 636 F.2d 323, 360 (D.C. Cir. 1980). That court held that, “[u]nless Congress has been extraordinarily rigid, there is likely a basis for an implication of *de minimis* authority to provide exemption when the burdens of regulation yield a gain of trivial or no value.” *Id.* at 360-61. The court emphasized that this is not a determination of whether the costs of control are justified by the benefits, but purely a determination that there will be no real benefit from control. *Id.* at 361. The court added that “when matters are truly *de minimis* naturally will turn on the assessment of particular circumstances, and the agency will bear the burden of making the required showing.” *Id.* at 360. Neither EPA nor Avenal made any attempt to make the required demonstration let alone to meet the heavy burden required to do so.

Commenters note that EPA proposed SILs for PM_{2.5} in 2007. *See* 72 Fed. Reg. 54112 (Sept. 21, 2007). Under two of the three options EPA proposed, the modeled levels of Avenal’s PM_{2.5} impacts would be considered significant. *See id.* at 54140. Commenters hasten to add, however, that even these proposed SILs are arbitrary numbers based on

Letter to Ms. Shirley Rivera

October 15, 2009

Page 13 of 19

ratios that have no demonstrated or rational relationship to compliance with the NAAQS, and are not based on any demonstration of *de minimis* impacts. The numbers have no connection to what a *de minimis* source might look like or contribute to nonattainment. EPA has offered no evidence that the gain from regulating sources with impacts below the proposed SILs will in fact be trivial. For example, the most protective proposed “option 3” Class II 24-hour SIL of 1.2 $\mu\text{g}/\text{m}^3$ is fully 13 percent of the entire 24-hour increment EPA proposes for these areas. It is absurd to claim that a source consuming over 10 percent of the allowable increment (*i.e.*, the maximum deterioration allowed in clean areas) has only a “trivial” impact in an area that is already violating the standard.

If EPA and Avenal propose to demonstrate compliance with section 165(a)(3) by claiming that the contribution to violations of the ozone or PM_{2.5} NAAQS will be *de minimis*, EPA and Avenal need to offer for public comment the rationale for applying a given threshold. The proposed PSD permit includes nothing of the sort.

Even if one were to accept the use of the PM₁₀ thresholds, Avenal’s modeling analysis would still be inadequate to demonstrate compliance with section 165(a)(3) because the modeling results do not account for the contribution of secondary PM_{2.5} (or ozone) formation as a result of the significant NO_x emissions from the source. There is no basis for refusing to include secondarily formed PM_{2.5} in the assessment of ambient impacts. As EPA explained in its rulemaking proposing the increments of deterioration that it will allow, the Agency compared “the marginal pollutant concentration increases allowed by the safe harbor increment levels against the pollutant concentrations at which various environmental responses occur.” 72 Fed. Reg. at 54133. In determining the scope of environmental effects, EPA “evaluated the health and welfare effects of both direct PM_{2.5} and secondarily-formed PM_{2.5} that may result from the transformation of other pollutants such as SO₂ and NO_x.” *Id.* at 54127. It would be irrational to suggest that notwithstanding the fact that the increments are based on an assessment of the impacts of both direct and secondary PM_{2.5}, the modeling to determine if such increments are violated or significantly impacted need only consider the direct fraction of these emissions.

This approach would be especially irrational here, where the District has already acknowledged that secondary PM_{2.5} in the form of ammonium nitrate is a major component of ambient PM_{2.5} concentrations in the San Joaquin Valley. *See* San Joaquin Valley Unified Air Pollution Control District, “2008 PM_{2.5} Plan,” at 3-7 (April 30, 2008) (adding that “ammonium nitrate formation is limited by the availability of nitric acid”);

Letter to Ms. Shirley Rivera

October 15, 2009

Page 14 of 19

see also id. at 6-6 (noting District's strategy is to "giv[e] priority to NO_x controls."). The analysis of Avenal's impact on ambient PM_{2.5} concentrations simply cannot ignore the addition of 144 tons per year of NO_x emissions in assessing whether the contribution to PM_{2.5} nonattainment in the Valley will be significant.

Models are available to conduct this required analysis. Section 5.2.2.1.a of Appendix W to 40 CFR Part 51 ("Guideline on Air Quality Models") advises that in choosing models for analyzing the impacts of multiple sources (which would be the exercise required for Avenal if it chooses to claim the ambient air quality benefits of the emission reduction credits it has acquired), "[c]ontrol agencies with jurisdiction over areas with secondary PM-2.5 problems . . . [should] use models which integrate chemical and physical processes important in the formation, decay and transport of these species (e.g., Models-3, CMAQ or REMSAD)." While the guidelines note that "generally regional models are not designed for the evaluation of individual sources," they also provide that "[i]f it is determined that regional transport of secondary particulates, such as sulfates or nitrates, is likely to contribute significantly to the problem, use of a regional model may be the preferred approach." *See* 40 CFR Part 51, App. W, §§ 5.1.f and 7.2.6.b.

In addition to considering secondary pollutant formation, the analysis should analyze the effect of adding 1.7 million tons per year of CO₂ to the area. Recent studies have shown that emissions of CO₂, can create localized increases in ambient concentrations (so called CO₂ "domes") that in turn alter local atmospheric chemistry, increasing the formation of ozone and fine particulate matter concentrations. *See* Jacobson, M., "On the casual link between carbon dioxide and air pollution mortality," 35 *Geophys. Res. Letters* L03809 (Feb. 2008) (Attachment G, hereto). Of particular concern is the effect on particulate matter formation. As Dr. Jacobson explains in a recent paper, "While higher temperatures slightly decrease[] PM_{2.5}, higher water vapor due to [anthropogenic CO₂ emissions] increased PM_{2.5} by increasing aerosol water content, increasing nitric acid and ammonia gas dissolution, forming more particle nitrate and ammonium." Jacobson, M., "The enhancement of local air pollution by urban CO₂ domes," at 3 (April 3, 2009) (Attachment H, hereto). The result, according to Dr. Jacobson's modeling, was a net increase in PM_{2.5} concentrations with increases in CO₂ emissions. *Id.*

As noted above, it is no excuse to hide behind the claim that these atmospheric chemistry issues are difficult to model. Dr. Jacobson has outlined an approach to quantifying the local impact of increasing CO₂ emissions. *See* Attachment G. There are several options for modeling these impacts EPA could explore. EPA could use the PM_{2.5} impacts predicted without increased CO₂ and then apply Dr. Jacobson's

Letter to Ms. Shirley Rivera

October 15, 2009

Page 15 of 19

approach to adjust these results. Alternatively, EPA could use Dr. Jacobson's approach to look at how CO₂ emissions increases will affect temperature and aerosol water content, and then use these numbers as inputs in the underlying PM_{2.5} modeling.

In the end, the analysis conducted to date on the ambient impacts of the Avenal plant is insufficient to "demonstrate[]" that emissions will not cause or contribute to air pollution in excess of the PM_{2.5} NAAQS. *See* CAA § 165(a)(3). Should EPA and Avenal persist in trying to claim that this new major source of pollution will contribute only insignificantly to ongoing violations of the ozone and PM_{2.5} NAAQS, EPA must work with Avenal to prepare an adequate analysis and circulate that analysis for public review and comment.

It is important to note that a *de minimis* demonstration is not the only option available to Avenal. As EPA has explained, "where emissions from a proposed PSD source or modification would have an ambient impact in a non-attainment area that would exceed the [significant impact levels], the source is considered to cause or contribute to a violation of the NAAQS and may not be issued a permit without obtaining emission reductions to compensate for its impact." 72 Fed. Reg. 54112, 54138 (Sept. 21, 2007). In other words, a facility can still be permitted even if the impact on ambient concentrations in a nonattainment area would be significant as long as the source can demonstrate that it has obtained emission reductions from other sources to compensate for its impact. This alternative is discussed in more detail below.

B. The District's Defective Offset Requirements Will Not Prevent the Project from Contributing to Violations of the National Standards

Neither EPA nor Avenal has suggested that the impacts on ambient concentrations of PM_{2.5} and ozone will be offset, nor could they based on the current record. As noted above, the impacts on ambient ozone have never been assessed and the analysis of the impacts on ambient PM_{2.5} concentrations is defective. More importantly, neither EPA nor Avenal has provided any record for showing how the offsets obtained for this project will compensate for the impacts of this source. To the contrary, based on the record to date, it is clear that the emission reduction credits described by Avenal will provide no compensating benefit whatsoever to offset the new ambient impacts the Avenal plant will create.

The first problem with relying of the District's nonattainment new source review program to satisfy the requirement of section 165(a)(3) is that the nonattainment new

Letter to Ms. Shirley Rivera

October 15, 2009

Page 16 of 19

source review program and the PSD program are fundamentally different when it comes to offsets. The nonattainment new source review program looks at the balancing of emissions increases and decreases as a kind of accounting problem based on tons of emissions. *See* CAA § 173(a) (focusing on “total tonnage” of emissions). This is particularly true for the District’s new source review program. EPA has recognized that the District’s program fails to comply with the requirements of the Clean Air Act by, among other things, allowing sources to offset only to preset thresholds rather than down to zero, failing to apply the ratios specified in the Act, and refusing to ensure that emission reductions are surplus at the time of use. *See* 66 Fed. Reg. 37587 (July 19, 2001). EPA has waived these statutory violations by allowing the District to demonstrate overall equivalency of the District’s offset requirements to the requirements of the Clean Air Act. *See* 69 Fed. Reg. 27837 (May 17, 2004). This accounting approach has no relation to what is actually happening in the ambient air. Moreover, while the equivalency approach relied upon in the District might have been theoretically viable at the time EPA approved it, the approach has become bankrupt with the District’s bump up to extreme nonattainment for ozone in 2004. Since then, the federal rules should have been requiring offsets for sources with NO_x or VOC emissions over 10 tons per year, but the District has not been applying these lower thresholds in its annual equivalency demonstration. At this point, there is no rational basis for believing that the District is achieving all of the emission reductions needed even to meet the accounting requirement of Clean Air Act section 173(a).

The requirements in section 165(a)(3) and 51.165(b)(3), by contrast, focus on “air pollution” and the “impact” on “air quality” as opposed to merely the tons of emissions. This difference is often used to the advantage of sources seeking a PSD permit by allowing them to claim that their significant impacts can be mitigated through less than complete offset of their emissions. Here, however, because the District allows sources to use offsets that are worthless in their benefit to air quality, the requirements of section 165(a)(3) cannot be met through the bankrupt accounting games approved for the nonattainment new source review program in the San Joaquin Valley.

In its Final Determination of Compliance (“FDOC”) document, the District calculated what it asserts are acceptable offset targets for the project’s NO_x, VOC, and PM₁₀ emissions. The District established these offset targets as the project’s total emissions, minus any emissions from exempt equipment, minus an ‘offset threshold’ for each pollutant, times a distance offset ratio of 1.5:1 (because the reductions used as offsets took place more than 15 miles from the Avenal project). Additionally, the District

Letter to Ms. Shirley Rivera

October 15, 2009

Page 17 of 19

allowed the substitution of SO_x emission reduction credits to offset PM-10 emissions at a 1:1 ratio.

As noted above, this calculation of the emission reduction credits (“ERCs”) needed to offset the tons of emission increases that will be generated by Avenal includes no analysis of the actual impact the proposed project will have on air quality or the mitigation of that impact that will be provided by the ERCs. As explained by the CEC in a letter dated August 12, 2008, (Attachment I, hereto), the applicant’s proposed mitigation includes the use of ERCs issued between 1991 and 2002. While the District may allow the use of these very old ERCs to satisfy the accounting requirements of its defective nonattainment new source review program, for PSD purposes, the reductions represented by these ERCs are already reflected in the current ambient air quality concentrations used to assess Avenal’s projected impact. Neither EPA nor the District has demonstrated how emissions reductions that are already reflected in current air quality levels, which continue to violate the national standards, can be used to show that the new emissions from the proposed project will not cause or contribute to a violation of any NAAQS in the project impact area.

In addition, as the District has pointed out, the reductions being used as offsets took place well outside the proposed project site. In fact, as far as commenters can tell¹², a majority of the reductions took place more than 75 miles away from the proposed project location. Without performing modeling or other technical analysis to show how these distant reductions can possibly offset the impact of the new emissions on the project impact area, EPA cannot conclude that the ERCs identified by the applicant adequately prevent the project from causing or contributing to a violation of any NAAQS.

Finally, even if the temporal and spatial defects of these offsets could be ignored, the emission reductions suffer from the further defect that the District relies on inter-pollutant trading that has no rational basis. The District has allowed Avenal to comply with the nonattainment new source review requirements for PM_{2.5} offsets by substituting SO_x emission reductions on a 1 to 1 basis (this ratio becomes 1.5 to 1 when factoring in the distance offset ratio). This ratio is entirely unsupported by the record. EPA, in its implementation of the new source review program for PM_{2.5}, determined a

¹² Despite an August 12, 2008 request by the CEC, a full description of the original emission reduction site and date, and the method of reduction for the ERCs was never provided by the applicant or the District. In fact, a number of the ERCs listed in the FDOC do not even appear on the District’s Emission Reduction Credits Registry.

Letter to Ms. Shirley Rivera

October 15, 2009

Page 18 of 19

nationwide preferred ratio of 40 to 1 for trading SO_x emission reductions for PM_{2.5} emission reductions, unless a demonstration can be made, substantiated “by modeling and/or other technical demonstrations of the net air quality benefit for PM_{2.5} ambient concentrations,” that another ratio is locally appropriate. 73 Fed. Reg. 28321, 28339 (May 16, 2008). According to EPA, these local determinations must address a number of local factors, including but not limited to: 1) the relative magnitude of emissions of direct PM_{2.5} and precursor gases within the geographic area, 2) the relative contribution to local PM_{2.5} nonattainment of directly emitted PM_{2.5} and individual precursors from the various sources or source categories under consideration as part of a potential inter-pollutant trade, and 3) the meteorological conditions and topography of the area, which result in different source-receptor relationships across pollutants within the local area. *Id.* The District has never made any such demonstration to justify the lower ratio applied here.¹³ Given the total absence of analysis supporting a 1 to 1 benefit ratio for SO_x emission reductions, EPA simply cannot reasonably rely on the SO_x ERCs required by the District to meet the requirements 165(a)(3) for PM_{2.5}.

While EPA could grant Avenal a PSD permit with a showing that the contributions to ongoing ozone and PM_{2.5} nonattainment concentrations will be offset, no such demonstration has been made to date. The emission reduction credits allowed to be used under the defective San Joaquin Valley Unified Air Pollution Control District nonattainment new source review program are insufficient to satisfy this demonstration. Should EPA wish to rely on an argument that emission reductions have been required to compensate for the ambient impacts of the Avenal project, EPA must make that demonstration on the record and circulate it for public review and comment.

IV. CONCLUSION

There is still considerable work to be done on this proposed PSD permit. Many critical issues have not been analyzed and a revised proposal is necessary. Commenters look forward to working with EPA to ensure the completion of a full and open analysis of the air quality issues surrounding this proposed project.

¹³ As EPA pointed out in comments on another San Joaquin Valley power plant project, the District’s “methodology” for determining appropriate inter-pollutant ratios has never been approved by EPA. *See* EPA’s May 21, 2009 Comments on Project Number N-1083212 (“the underlying methodology to determine the appropriate ratios for inter-pollutant offsets has not been approved by EPA . . . It is important to note that modeling is a critical component of an inter-pollutant offset analysis . . .”) (See Attachment J, hereto)

Letter to Ms. Shirley Rivera

October 15, 2009

Page 19 of 19

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Cort". The signature is fluid and cursive, with the first name "Paul" and last name "Cort" clearly distinguishable.

Paul Cort

Staff Attorney



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

APR - 1 2010

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards

FROM: Stephen D. Page, Director *Stephen Page*
Office of Air Quality Planning & Standards (E404-04)

TO: Air Division Directors and Deputies
Regions I - X

This memorandum responds to inquiries that we are receiving from parties who are currently developing or reviewing applications for Prevention of Significant Deterioration (PSD) permits under the Clean Air Act (CAA) requesting that the Office of Air and Radiation (OAR) provide guidance on the applicability of PSD permitting requirements to a newly promulgated or revised National Ambient Air Quality Standard (NAAQS or standards). Accordingly, I am writing to reiterate the Environmental Protection Agency's (EPA's) existing interpretation of the relevant provisions of the CAA and EPA regulations, and EPA's position on how these requirements apply under the federal PSD program.

General Applicability of PSD Permit Requirements to New or Revised NAAQS

The CAA requires that proposed new and modified major stationary sources must, as part of the issuance of a permit to construct, demonstrate that emissions from the new or modified major source –

will not cause, or contribute to, air pollution in excess of any
(A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies...;
(B) national ambient air quality standard in any air quality control region; or
(C) any other applicable emission standard or standard of performance under this chapter;

CAA §165(a)(3). Similarly, EPA's federal PSD program regulations at 40 CFR 52.21(k)(1) require proposed sources and modifications to demonstrate that their allowable emissions will not cause or contribute to a violation of "any national ambient air quality standard in any air quality control region."

EPA generally interprets the CAA and EPA's PSD permitting program regulations to require that each final PSD permit decision reflect consideration of any NAAQS that is in effect at the time the permitting authority issues a final permit. As a general matter, permitting and licensing decisions of regulatory agencies must reflect the law in effect at the time the agency makes a final determination on a pending application. See *Ziffrin v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977); *In re: Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 614-616 (EAB 2006); *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n. 10 (EAB 2002).

Consistent with such interpretations, EPA has previously concluded that the relevant provisions cover any NAAQS that is in effect at the time of issuance of any permit. For example, in the context of applying the PSD provisions to the NAAQS for particulate matter less than 2.5 micrometers (PM_{2.5}), EPA has stated that "section 165 of the CAA suggests that PSD requirements become effective for a new NAAQS upon the effective date of the NAAQS." 73 FR 28321, 28340, (May 16, 2008); 70 FR 65984, 66043, (Nov. 1, 2005). That observation was based, in part, on EPA guidance for implementing the PM_{2.5} NAAQS that the Agency issued shortly after those standards first became effective in 1997. John Seitz, EPA Office of Air Quality Planning and Standards, "Interim Implementation for the New Source Review Requirements for PM_{2.5}" (Oct. 23, 1997). Both the 1997 guidance and EPA's final rule addressing the application of the PSD program to PM_{2.5} explained that section 165(a)(1) of the CAA provides that no new or modified major source may be constructed without a permit that meets all the requirements in section 165(a). In addition, those documents observe that one such requirement is the provision in section 165(a)(3) which says that emissions from such source may not cause or contribute to a violation of any NAAQS. The October 23, 1997 guidance provided an interim policy for assuring compliance with the requirements for PM_{2.5}, after observing that the "new NAAQS for PM_{2.5}, became effective on September 16, 1997." In addition, the guidance expressed EPA's intent to provide a separate memorandum that would address "EPA's views on implementing the ozone and PM₁₀ NAAQS during the interim period following the effective date of the new 8-hour ozone and revised PM₁₀ NAAQS." [Emphasis added.] Those statements made shortly after the promulgation of new NAAQS in 1997 are consistent with the view expressed in the final rule for PM_{2.5} in 2008 that "PSD requirements become effective for a new NAAQS upon the effective date of the NAAQS."

Additional precedent for this interpretation can be found in the 1987 final rule titled "Regulations for Implementing Revised Particulate Matter Standards" (52 FR 24672, July 1, 1987) issued at the time EPA established new PM₁₀ standards. In that rule, EPA stated that "once the PM₁₀ NAAQS becomes effective, EPA will be responsible for the protection of the PM₁₀ NAAQS as well as the review of PM₁₀ as a regulated pollutant." 52 FR at 24682. In support of that conclusion, EPA observed that the federal

PSD regulations at 40 CFR 52.21(k)(1) contain “a general provision requiring prospective PSD sources to demonstrate that their potential emissions will not cause or contribute to air pollution in violation of ‘any’ NAAQS.” *Id.* at 24682 n. 9. Based on that analysis, EPA concluded that “[w]hen the revised NAAQS for particulate matter becomes effective, each PSD application subject to EPA’s Part 52 PSD regulations, and not eligible to be grandfathered under today’s action, must contain a PM₁₀ NAAQS analysis.” 52 FR at 24684.

As illustrated above, under certain circumstances EPA has previously allowed proposed new major sources and major modifications that have submitted a complete PSD permit application before the effective date of new requirements under the PSD regulations, but have not yet received a final and effective PSD permit, to continue relying on information already in the application rather than immediately having to amend applications to demonstrate compliance with the new PSD requirements. In the transition from the total suspended particulate NAAQS to the PM₁₀ NAAQS, EPA explicitly established rule provisions that allowed proposed new major sources and major modifications that had submitted a complete PSD permit application before the effective date of new PM₁₀ NAAQS, but that had not yet received a final and effective federally-issued PSD permit, to continue relying on information already in the submitted application rather than immediately having to amend applications to demonstrate compliance with the new PSD requirements. *See, e.g.*, 40 CFR 52.21(i)(1)(x). EPA has adopted similar provisions pertaining to new or revised PSD increments. 40 CFR 52.21(i)(9)-(10). Those proposed sources and modifications meeting these transition requirements were “grandfathered” or exempted from the new PSD requirements that would otherwise have applied to them. Thus, while we have included the necessary provisions to grandfather sources from new requirements under certain circumstances, we have not always chosen to do so for NAAQS revisions in general.

Applicability of the New 1-Hour NO₂ NAAQS to Existing Permit Applications

On January 22, 2010, the EPA Administrator signed a final rule containing a new NAAQS for nitrogen dioxide (NO₂) based on a 1-hour averaging time. That final rule was published in the Federal Register on February 9, and will become effective on April 12, 2010. EPA did not promulgate a grandfathering provision related to the 1-hour NO₂ NAAQS for permits in process but not yet issued as of April 12, 2010. Accordingly, permits issued under 40 CFR 52.21 on or after April 12, 2010, must contain a demonstration that the source’s allowable emissions will not cause or contribute to a violation of the new 1-hour NO₂ NAAQS. In the case of the new NO₂ 1-hour NAAQS, while the short-term standard is new, the pollutant is not, having been considered a regulated pollutant for many years pursuant to the NO₂ annual NAAQS. There are no exceptions under 40 CFR 52.21 in this case because as noted above, EPA has not adopted a grandfathering provision applicable to the 1-hour NO₂ NAAQS that would enable the required permit to be issued to prospective sources in the absence of such ambient air quality demonstration.

cc: Jeff Clark
Anna Wood
Peter Tsirigotis
Lydia Wegman
Richard Wayland

**EARTHJUSTICE**ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

April 21, 2010

VIA ELECTRONIC MAIL

Ms. Shirley Rivera (AIR-3)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Short-term NO₂ NAAQS and the Proposed Prevention of Significant Deterioration
Permit for the Avenal Energy Project (PSD Permit No. SJ 08-01)

Dear Ms. Rivera:

Greenaction for Health and Environmental Justice, California Communities Against Toxics, the Center on Race, Poverty & the Environment, Pacific Environment, and the Tehipite Chapter on behalf of the Sierra Club write to request that EPA require the Avenal Power Center, LLC to demonstrate that its proposed new 600 MW electric power generating plant in Avenal, California will not cause or contribute to violations of the 1-hour national ambient air quality standard ("NAAQS") for nitrogen dioxide ("NO₂"). EPA promulgated the final 1-hour NO₂ standard on February 9, 2010. 75 Fed. Reg. 6474 (February 9, 2010). The standard became effective April 12, 2010. *Id.* Given the lack of the required demonstration in the permit application, these groups further request that EPA withdraw its March 19, 2008 determination that the Avenal Power Center's application is administratively complete. *See* Letter from Gerardo Rios, Chief, Permits Office, U.S. EPA, Region IX, to Stuart Zisman, Avenal Power Center, LLC (Mar. 19, 2008). Because the application fails to include the information necessary for assessing the potential impact of the proposed source on ambient 1-hour NO₂ concentrations in the heavily polluted San Joaquin Valley, the application does not meet the definition of "complete" provided in 40 CFR § 52.21(b)(22).

The new 1-hour NO₂ standard of 100 parts per billion is necessary to protect public health, especially that of the elderly and children, from the harms of short-term exposure to elevated levels of NO₂. As such, the standards will help reduce respiratory-related emergency room visits and hospital admissions. *See* U.S. EPA, Fact Sheet: Final Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide, available at <http://www.epa.gov/air/nitrogenoxides/pdfs/20100122fs.pdf>. EPA issued the 1-hour standard because a short-term NAAQS is necessary to protect public health above and beyond the existing annual standard. *See, e.g.,* 75 Fed. Reg. at 6483-90. Demonstrating protection of only the annual NO₂ standard therefore is insufficient to comply with the Clean Air Act's New Source Review program and to protect public health.

As a proposed major new source of NO₂, the 600 MW plant cannot be permitted if it will negatively impact air quality. The Clean Air Act clearly prohibits the construction of a major facility unless the owner or operator “demonstrates . . . that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of *any* . . . national ambient air quality standard in any air quality region . . .” Clean Air Act § 165(a)(3) (emphasis added). The 1-hour NO₂ NAAQS is “any” national ambient air quality standard, and thus Avenal must make the required demonstration under the short-term NAAQS.

EPA has recognized that “major new and modified sources applying for NSR/PSD permits must demonstrate that their proposed emissions increases of NO_x will not cause or contribute to a violation of *either the annual or the 1-hour NO₂ NAAQS . . .*” 75 Fed. Reg. at 6525 (emphasis added). The Agency furthermore has commented that any final permit issued after the April 12, 2010 effective date of the new NO₂ standard must include the required air quality demonstration for the 1-hour NO₂ NAAQS. *See* Memo from Stephen D. Page, Director, OAQPS, EPA, to EPA Regional Air Division Directors (April 1, 2010).¹

The proposed Avenal Power Plant will emit 144.3 tons per year of NO₂. *See* EPA, “Statement of Basis and Ambient Air Quality Impact Report: Avenal Energy Project” at 14 (June 2009). The applicant has not submitted any analysis to demonstrate protection of the 1-hour NO₂ NAAQS of 100 ppb from this significant new source of NO_x pollution. EPA must either require a 1-hour NO₂ analysis or deny the permit for failure to demonstrate protection of this NAAQS. The modeling analysis must use emission rates that reflect the maximum short-term rate under the draft permit to match the short-term NAAQS.

Commenters are aware that Avenal Power Center, LLC has filed a deadline action against EPA for failure to act on Avenal’s permit application within the deadlines provided under Clean Air Act section 165(c). Given the absence of the required analysis regarding potential 1-hour NO₂ impacts, commenters believe any settlement of this litigation that commits EPA to act within a specified time period would be premature. Instead, EPA must withdraw its determination that the Avenal application is administratively complete pending submission of the missing analysis. Once that analysis is provided, EPA can reassess whether all of the information necessary for assessing the application has been provided, *see* 40 CFR § 52.21(b)(22), and then re-propose its decision along with the supporting statement of basis.

¹ *See also* Letter from Becky Weber, Director, Air and Waste Management Division, U.S. EPA Region 7, to John Mitchell, Director, Kansas Dept. Env’tl Health (April 2, 2010) (regarding proposed Sunflower Electric Company’s Holcomb 2 facility). In addition EPA Region 4 recently commented on a draft major modification permit for the J.K. Smith facility in Kentucky that: “On January 22, 2010, EPA signed into law a new National Ambient Air Quality Standard (NAAQS) for nitrogen dioxide (NO₂). The new standard is a 1-hour standard set at the level of 100 parts per billion (ppb). The effective date of the new NAAQS will be April 12, 2010. *If the final PSD permit for J.K. Smith has not been issued by the time the new NAAQS is effective, the Division will need to include the appropriate air quality analysis before a final PSD permit is issued.*” (emphasis added). Available at <http://www.air.ky.gov/NR/rdonlyres/391526C2-4F06-4E8C-9D6F-217B3C9DEB25/0/AttachmentsAD.pdf>.

Thank you for your attention to this important matter. If you have any questions, please feel free to contact me at (510) 550-6725.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Cort". The signature is fluid and cursive, with the first name "Paul" and last name "Cort" clearly distinguishable.

Paul Cort

cc: Jared Blumenfeld, Regional Administrator, EPA
Debbie Jordan, Air Division Director, EPA

PER 000027



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

AUG 12 2010

VIA EMAIL AND U.S. MAIL

Jim Rexroad
Avenal Power Center, LLC
One Allen Center
500 Dallas Street, Level 31
Houston, TX 77002

Dear Mr. Rexroad:

Thank you for the letters of June 28, 2010 and July 13, 2010 from your counsel, Jeffrey Holmstead, to Ms. Julie Walters, counsel for EPA Region 9, and Ms. Stephanie Talbert, counsel with the U.S. Department of Justice. These letters provide the Avenal Power Center LLC's (Avenal or APC) response to EPA's letter dated June 15, 2010 concerning Avenal's Supplemental NO₂ Air Quality Impact Analysis for the Avenal Energy Project (AEP) dated May 13, 2010 and submitted to EPA on May 14, 2010. Avenal's supplemental analysis was intended to address the 1-hour national ambient air quality standard (NAAQS) for nitrogen dioxide (NO₂), which became effective April 12, 2010, for the AEP.

EPA's June 15, 2010 letter stated that EPA had determined that significant additional information must be provided by Avenal for EPA to evaluate whether emissions from the AEP will cause or contribute to ambient air pollution in excess of the Federal 1-hour NO₂ standard. The EPA letter provided further detail about 10 areas in Avenal's May 13, 2010 submittal in which EPA had determined that additional information was necessary. Avenal's June 28, 2010 and July 13, 2010 letters indicate that Avenal believes that all necessary information has been submitted to EPA to demonstrate compliance with the 1-hour NO₂ NAAQS. We disagree. While some of the requested information has been provided, we believe the submittals from Avenal to date do not contain all the information necessary for an acceptable 1-hour NO₂ NAAQS compliance analysis. The text in Attachment 1 below provides a detailed explanation of why the information submitted by Avenal to date is not adequate to demonstrate compliance with the 1-hour NO₂ NAAQS and describes what additional information would be necessary for EPA to evaluate Avenal's analysis.

Avenal's June 28 and July 13 letters also reiterate Avenal's position that the 1-hour NO₂ NAAQS does not apply to the AEP, but that Avenal has provided additional modeling information for that standard in an effort to obtain its PSD permit in a timely manner. We certainly understand Avenal's frustration with having to address the Federal 1-hour NO₂

EPA Response to Avenal Letters dated June 28, 2010 and July 13, 2010
Page 13

It appears that the approach used to combine hourly modeled and monitored NO₂ concentrations for comparison to the 1-hour California Ambient Air Quality Standard (CAAQS) in Avenal's AFC submittal to the CEC was consistent with the approach recommended as the "first tier" assumption for combining modeled and monitored NO₂ concentrations described in the June 28, 2010, NO₂ clarification memo. The results from the 1-hour NO₂ CAAQS comparison summarized in Table 6.2-31 (6.2-66) of the AFC show maximum 1-hour Avenal facility impacts of 190 µg/m³, combined with a background concentration of 137.2 µg/m³ to give a total impact of 327.2 µg/m³. This cumulative 1-hour NO₂ impact is well above the EPA 1-hour NO₂ standard, although we recognize that the 1-hour modeled NO₂ concentration documented in the AFC is likely to be higher than the 98th-percentile of the annual distribution of maximum daily 1-hour values used as the form of the 1-hour EPA standard. However, the AFC results are also about 2.7 times higher than the cumulative 1-hour NO₂ impact reported in the May 13, 2010 submittal, which serves to highlight the significance of the issue raised by EPA in this comment, and to emphasize the importance of having clear justification and documentation of the approach taken for combining modeled and monitored concentrations for comparison to the NAAQS.

VIII. Paragraph 8

Paragraph 8 address EPA's comment that Avenal's May 13, 2010 1-hour NO₂ submittal labeled hours with missing ambient monitored background NO₂ as missing for combined modeled and monitored impact, which effectively discards valid modeled data. The applicant's response states that "Although modeled concentrations are discarded when corresponding background concentrations are not available, the methodology used faithfully follows the requirements in the 1-hour NO₂ NAAQS Final Rule, the only reasonably applicable regulatory guidance available at the time of this supplemental 1-hour NO₂ analysis."

The procedures in Appendix S to 40 CFR Part 50, which are provided in the reference cited as "the only reasonably applicable regulatory guidance available at the time of this supplemental 1 hour NO₂ analysis," apply to ambient monitored NO₂ concentrations and are not relevant for modeled NO₂ concentrations. EPA disagrees that it is suitable to apply the currently available monitoring guidance for the 1-hour NO₂ standard to modeling applications, as suggested by Avenal.

The applicant's response states that "EPA's suggestion that we should rely on guidance that has yet to be issued would appear unreasonable in light of the suitability of the currently available guidance with respect to monitoring compliance with this NO₂ standard by states." EPA's comment objects to discarding valid modeled data. The applicant should choose a method for combining modeled and monitored data that does not discard valid modeled data and which is consistent with Appendix W. EPA's guidance entitled *Applicability of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard* (June 28, 2010) may be useful in preparing an analysis of the 1-hour NO₂ NAAQS.

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AVENAL POWER CENTER, LLC,

Plaintiff,

v.

**U.S. ENVIRONMENTAL PROTECTION
AGENCY, *et al.*,**

Defendants.

**Case No. 10-cv-00383 (RJL)
(Hon. Richard J. Leon)**

**PLAINTIFF AVENAL POWER CENTER, LLC'S
MOTION FOR JUDGMENT ON THE PLEADINGS PURSUANT TO RULE 12(c)
AND REQUEST FOR EXPEDITED DECISION**

Pursuant to Federal Rule of Civil Procedure 12(c), Plaintiff Avenal Power Center, LLC ("Avenal" or the "Company"), by and through its attorneys, files this Motion for Judgment on the Pleadings and Request for Expedited Decision and states:

The Complaint Avenal filed against the U.S. Environmental Protection Agency ("EPA" or "the Agency") and Lisa P. Jackson, Administrator of the U.S. Environmental Protection Agency (the "Administrator") (collectively, "Defendants" or "EPA"), prevails as a matter of law because (1) Defendants violated a statutory deadline imposed by Congress in the Clean Air Act ("CAA" or "the Act"), and (2) Defendants' violation of that deadline was unreasonable.

Avenal filed a CAA permit application that EPA found to be complete as of March 19, 2008. Therefore, under Section 165(c) of the Act, EPA was required to take final action on Plaintiff's permit application within one year—by no later than March 19, 2009. *See* 42 U.S.C. § 7475(c) (2006). Defendants have failed to perform this statutory duty and continue, for unlawful reasons, to delay a final decision granting Plaintiff's permit. Further, Defendants have offered no cognizable defense for EPA's statutory violations and failures.

The sixth *TRAC* factor notes that "the court need not find any impropriety lurking behind agency lassitude in order to hold that agency action is unreasonably delayed." *TRAC*, 750 F.2d at 80 (internal quotes omitted). Where impropriety lurks behind agency lassitude, "the agency will have a hard time claiming legitimacy for its priorities." *In re Barr*, 930 F.2d at 76. Although Plaintiff does not accuse EPA of any hidden impropriety in this case, it does note the Agency's stated interest in imposing new requirements on pending permit applications—something that is contrary to the statutory scheme created by Congress and is not countenanced by the Supreme Court.

V. REQUEST AND RATIONALE FOR SEEKING EXPEDITED DECISION

EPA's attempt to impose new standards retroactively has left Avenal in an untenable position. Because of new permitting requirements that EPA has issued in the last few months, and others that the Agency has proposed or announced but not yet issued, Avenal is now facing the prospect of a never-ending permitting process. *See, e.g.*, 75 Fed. Reg. 2938 (Jan. 19, 2010) (proposed new standard for ozone); 75 Fed. Reg. 6474 (final rule establishing new standard for NO₂); 75 Fed. Reg. 6827 (Feb. 11, 2010) (proposal to apply new PM modeling requirements to pending permit applications); 75 Fed. Reg. 17004 (April 2, 2010) (final rule imposing new permitting requirements for greenhouse gases, including for permit applications pending as of January 2, 2011); 75 Fed. Reg. 35520 (Jun. 2, 2010) (final rule establishing new standard for SO₂).

The prospect of a perpetual permitting process is not just a theoretical concern. EPA has already finalized new permitting requirements for greenhouse gases ("GHGs") that, by their own terms, will apply to Avenal unless EPA chooses (or is ordered by this Court) to issue the Avenal permit within the next four months. "We are not promulgating an exemption for PSD permit applications that are pending. . . . Any PSD permits issued on or after January 2, 2011 will need to address GHGs." 75 Fed. Reg. 17004, 17021; 75 Fed. Reg. 31514, 31527 (Jun. 3, 2010). Under

EPA's new GHGs rules, regardless of when a permit application was submitted, if the Agency refuses to grant the permit by the end of this year, then the permit applicant must go back and develop a new permit application that includes an extensive analysis of GHGs (without any guidance, at least to date, on how such an analysis should be performed or evaluated). *Id.* That analysis, and presumably anything else that EPA decides to require in the new application, must then go through another notice-and-comment process before EPA will even consider issuing a final permit. As the record in this case shows, this process (multiple rounds of public comment followed by the many months that EPA takes to review such comments) can go on for years. Then, if at any time during this process EPA decides to impose any new permitting standard or requirement, the permit applicant is sent back to starting line—all without any regard to the statutory deadline that Congress imposed on EPA for issuing permits.

Plaintiff understands that this Court has a very full docket and extensive obligations over the next six months, but Avenal respectfully requests that the Court decide this dispositive motion on an expedited basis and order EPA to grant the Avenal permit before the end of this year. Although the background in this case may appear somewhat complex, the legal issues presented to this Court are very straightforward. According to EPA, the only remaining reason for continuing to withhold its decision on the permit is that EPA wants to impose new requirements relating to NO₂ that did not exist at the time the permit application was submitted and found to be complete, or even as of the date by which EPA was statutorily required to issue the permit. (*See Answer, Defenses* ¶ 2) If this Court does not address this issue and order EPA to grant the permit by year end, then Avenal will be faced with a whole new set of legal and procedural issues and additional years of delay.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AVENAL POWER CENTER, LLC)	
)	
Plaintiff,)	
)	
v.)	Case No.: 1:10-cv-00383-RJL
)	(Hon. Richard J. Leon)
U.S. ENVIRONMENTAL PROTECTION)	
AGENCY and LISA P. JACKSON, in her)	
capacity as Administrator of the)	
U.S. Environmental Protection Agency)	
)	
Defendants.)	
_____)	

**MEMORANDUM OF POINTS AND AUTHORITIES IN OPPOSITION TO
PLAINTIFF'S MOTION FOR JUDGMENT ON THE PLEADINGS AND IN SUPPORT
OF DEFENDANTS' CROSS-MOTION FOR SUMMARY JUDGMENT**

Plaintiff Avenal Power Center, LLC ("Plaintiff" or "Avenal") brought this action pursuant to the citizen suit provision of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7604(a)(2), to compel Defendants, U.S. Environmental Protection Agency and Lisa P. Jackson, Administrator ("EPA"), to grant or deny its permit application pursuant to CAA section 165(c), 42 U.S.C. § 7475(c), which requires the Agency to do so within one year of the filing of a complete application. EPA does not dispute that it has failed to act on Plaintiff's permit application within one year of declaring the application complete. Accordingly, the only issue to be resolved in this suit is the question of remedy – *i.e.*, the appropriate deadline by which EPA must grant or deny Plaintiff's permit application. Because EPA cannot conclude review of Plaintiff's permit application on any schedule more expedited than that proposed herein, EPA requests that its motion for summary judgment on remedy be granted, and that the Court enter an

order to “retroactively” impose the new NO₂ standard, and asks this Court to prohibit EPA from applying any new standards retroactively. *See* Plaintiff’s Memorandum in Support at 14-16.

Although EPA disputes that this Court has jurisdiction to consider such a question or grant such relief in a deadline suit like this one, *see* discussion of Court’s authority in Part II of the Argument *supra*, EPA’s interpretation of the CAA requiring EPA to apply the standards in effect, including the hourly NO₂ standards, at the time of its final permit decision is reasonable.

Indeed, as noted *supra*, the plain language of both the Clean Air Act and applicable regulations require a PSD permit applicant to demonstrate that its facility will not cause or contribute to a violation of “any” NAAQS. *See* 42 U.S.C. § 7475(a)(3); 40 C.F.R. § 52.21(k). Since at least 1987, EPA has consistently interpreted the plain language of the Clean Air Act to require that each final PSD permit decision reflect consideration of any NAAQS in effect at the time the permitting authority issues a final permit. *See* Jordan Decl., Ex. 5, Page Memorandum. Supreme Court precedent and other cases support EPA’s interpretation that permitting and licensing decisions of regulatory agencies must reflect the law in effect at the time the agency makes a final determination on a pending application. *See Ziffrin, Inc. v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977). Accordingly, EPA’s determination that the NO₂ standards apply to Plaintiff’s permit application is reasonable under the plain language of the CAA and the corresponding regulations, and is supported by Supreme Court precedent and case law.

Plaintiff cites *Landsgraf v. USI Film Products*, 511 U.S. 244 (1994), in support of its argument that “EPA actions in this case . . . fly in the face of numerous court decisions disfavoring the retroactive application of new requirements.” Plaintiff’s Memorandum at 15.

Yet in *Landsgraf*, the Supreme Court stated that a retroactive requirement is one that “takes away or impairs vested rights acquired under existing laws, or creates a new obligation, imposes a new duty, or attaches a new disability in respect to transactions or considerations already past.”

Landsgraf, 511 U.S. at 269. “A statute [or rulemaking] does not operate ‘retrospectively’ merely because it is applied in a case arising from conduct antedating the statute’s [or rule’s] enactment, or upsets expectations based in prior law.” *Id.* (citations omitted).

Here, Plaintiff has not established that it acquired any rights by virtue of the submission of its permit application or the determination by EPA that its application was complete. In fact, nothing in CAA section 165, or elsewhere in the Act, establishes that Plaintiff is entitled to a decision on its permit application on the basis of the laws and regulations in effect at the time that permit application was submitted or deemed complete, or indeed that Plaintiff is necessarily entitled to have EPA grant, rather than deny, its application. *See generally* 42 U.S.C. § 7475. EPA did not promulgate any regulation exempting applications complete prior to April 12, 2010, from having to address the hourly NO₂ NAAQS. Thus, Plaintiff has no basis for such an expectation, let alone a vested right to the permit’s issuance without demonstrating compliance with the 1-hour NO₂ NAAQS promulgated during EPA’s review of the permit application.

EPA’s proposed schedule represents the reasonable minimum time necessary for EPA to complete review of Plaintiff’s hourly NO₂ NAAQS submissions, which EPA reasonably interprets the CAA to require, and proceed through the public notice and comment procedures to grant or deny Plaintiff’s permit application. Thus, because Plaintiff has requested relief that exceeds the scope of remedy authorized by the citizen suit provision, and EPA’s proposed remedy is reasonable and serves the public interest, EPA respectfully requests that the Court

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AVENAL POWER CENTER, LLC,

Plaintiff,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY and
LISA P. JACKSON, Administrator,
United States Environmental Protection Agency,

Defendants.

Case No.: 1:10-cv-00383-RJL

DECLARATION OF DEBORAH JORDAN

I, Deborah Jordan, under penalty of perjury, affirm and declare that the following statements are true and correct to the best of my knowledge and belief, and are based on my own personal knowledge or on information contained in the records of the United States Environmental Protection Agency (“EPA”) or supplied to me by EPA employees under my supervision at EPA.

1. I am Director of the Air Division, Region 9, EPA. EPA’s Region 9 Office generally has the responsibility within EPA for overseeing the implementation of the Clean Air Act (“CAA” or “the Act”) in the Region 9 area. In Region 9, EPA has delegated the authority to implement procedures for preconstruction review for prevention of significant deterioration (“PSD”) for new or modified major (stationary) sources under the CAA regulations in 40 C.F.R. § 52.21 to the Director of the Air Division.

2. I have been Director of the Air Division of Region 9 since March 7, 2004. Previously, I served as Associate Regional Administrator, in the role of chief of staff for former EPA Region 9 Regional Administrator Wayne Nastri. I have also served as Chief of the Federal Facilities and

PER 000036

Opinion and EPA practice. A true and correct copy of this September 1, 2010 letter is attached hereto as Exhibit 4.

II. EPA'S OUTSTANDING OBLIGATIONS

12. EPA must conclude that its ESA section 7 obligations are satisfied for purposes of making a final decision on Avenal's permit application. EPA has not yet received the requested ESA-related permit application addendum letter from Avenal, but anticipates that it will receive the letter shortly. If Avenal promptly submits an adequate commitment letter, EPA will be able to conclude that its ESA section 7 obligations are satisfied for purposes of making a final decision on Avenal's permit application, consistent with ESA regulations at 50 C.F.R. § 402.15(a).

13. EPA promulgated a new 1-hour national ambient air quality standard ("NAAQS") for nitrogen dioxide ("NO₂"), effective April 12, 2010. 75 Fed. Reg. 6474 (Feb. 9, 2010).

14. EPA interprets applicable statutes and regulations as precluding the Agency from issuing a PSD permit without a demonstration that the source will not cause or contribute to a violation of the hourly NO₂ standard. See Memorandum from Stephen D. Page, EPA Office of Air Quality Planning and Standards, Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards (Apr. 1, 2010), a true and correct copy of which is attached here to as Exhibit 5.

15. EPA is currently evaluating, pursuant to section 165(a)(3) of the CAA, whether Plaintiff has demonstrated that emissions from the Project will not cause or contribute to air pollution in excess of the hourly NO₂ NAAQS.

16. The public participation process that EPA has provided to date for the proposed Avenal PSD permit did not address the hourly NO₂ NAAQS. In addition, the public

participation process did not address the hourly sulfur dioxide (“SO₂”) NAAQS, which became effective on August 23, 2010. EPA has informed Avenal that it believes that the Project’s emissions would comply with the hourly SO₂ NAAQS, and that it has determined that additional analysis is not required from Avenal to address this standard, given that the Project’s SO₂ emissions are estimated to be 16.7 tons per year, which is below the significant emissions rate for SO₂, per 40 C.F.R. §§ 52.21(m)(1) and 52.21(b)(23)(i).

17. EPA has been working with Avenal through a number of letter exchanges and discussions to determine whether the proposed facility will comply with the hourly NO₂ standard. On August 17, 2010, Avenal confirmed its intent to provide EPA with the additional information and justification EPA requested concerning its hourly NO₂ NAAQS analysis by September 13, 2010 as requested by EPA. A true and correct copy of Avenal’s August 17, 2010 letter is attached hereto as Exhibit 6. EPA received an additional hourly NO₂ NAAQS submittal from Avenal on September 13, 2010, and is currently reviewing it. A true and correct copy of the cover letter and memorandum from that September 13, 2010 submittal (excluding the submittal’s attachments) is attached hereto as Exhibit 7.

18. Consistent with EPA regulations in 40 C.F.R. Part 124, EPA has determined that an additional 33-day public comment period, which will conclude with a public hearing, concerning EPA’s determination regarding whether emissions from the Project will cause or contribute to a violation of the hourly NO₂ NAAQS and the hourly SO₂ NAAQS is appropriate and necessary prior to Region 9’s making a final decision on the PSD permit application for the Project. EPA has determined that it must also respond to all significant comments raised during the public comment period or during any hearing, thus EPA must consider and respond to all such comments prior to making its final permit decision for the Project.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AVENAL POWER CENTER, LLC

Plaintiff,

v.

U.S. ENVIRONMENTAL PROTECTION
AGENCY and LISA P. JACKSON, in her
capacity as Administrator of the
U.S. Environmental Protection Agency

Defendants.

Case No.: 1:10-cv-00383-RJL
(Hon. Richard J. Leon)

DECLARATION OF REGINA MCCARTHY

I, Regina McCarthy, declare under penalty of perjury under the laws of the United States of America that the following is true and correct to the best of my knowledge, information and belief, and is based on my own personal knowledge or on information contained in the records of the United States Environmental Protection Agency (EPA) or supplied to me by EPA employees.

1. I am the Assistant Administrator of the Office of Air and Radiation in EPA, a position I have held since June 2009. The Office of Air and Radiation (OAR) is the EPA office that develops national programs, technical policies, and regulations for controlling air pollution. OAR's assignments include the protection of public health and welfare, pollution prevention and energy efficiency, air quality, industrial air pollution, pollution from vehicles and engines, acid rain, stratospheric ozone depletion, and climate change.

2. OAR is responsible for development of National Ambient Air Quality Standards and the development and implementation of regulations, policy, and guidance associated with the Prevention of Significant Deterioration (PSD) permitting program.

3. Prior to joining EPA, I served as the Commissioner of the Connecticut Department of Environmental Protection. I have worked at both the state and local levels on critical environmental issues, and helped coordinate policies on economic growth, energy, transportation and the environment. I have a B.A. in Social Anthropology from the University of Massachusetts at Boston and a joint M.S. in Environmental Health Engineering and Planning and Policy from Tufts University.

4. On February 9, 2010, EPA issued a National Ambient Air Quality Standard (NAAQS) for hourly concentrations of nitrogen oxides ("hourly NO₂ standard").

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5. In a prior declaration, I testified that applicants seeking PSD permits to construct stationary sources of air pollution have experienced unforeseen challenges with the preparation and review of information to predict the impact of proposed sources on hourly NO₂ concentrations. This gave rise to an EPA policy review that has now proceeded to the point that the agency can more specifically explain how it intends to move forward with action on the PSD permit application submitted by Avenal Power Center ("Avenal"). See paragraphs 5-8, Declaration of Regina McCarthy (January 7, 2011).

6. As part of this policy review, EPA has determined that it is appropriate, under certain narrow circumstances, to grandfather certain PSD applications from the requirement to demonstrate that the proposed facility will not cause or contribute to a violation of the hourly NO₂ standard. In addition, EPA believes the factors that justify such an approach for the hourly NO₂ standard also provide a basis not to subject these same permit applications to additional permitting requirements that have taken effect during the period of time these permit applications have been pending and permit applicants have been seeking to compile the additional information necessary to demonstrate that the source will not cause or contribute to a violation of the hourly NO₂ standard. The PSD permit application submitted by Avenal in 2008 is among those PSD permit applications that EPA believes it is appropriate to grandfather from these additional requirements, particularly in light of EPA's statutory obligation to grant or deny a complete PSD permit application within one year and other circumstances present in this case. EPA will propose to extend similar relief to other permit applicants that can show they are similarly situated. This determination represents a change in the position EPA has taken in this matter and in previous interpretive statements issued by EPA, including statements cited by EPA to support its Cross Motion for Summary Judgment in this litigation.

7. Because this change in position requires that EPA modify or narrow previous interpretations of EPA regulations and the position EPA has taken in public statements to this court regarding this permit, the Agency reads applicable regulations and case law to require that the EPA provide the public with an opportunity to comment on this proposed action before the Agency can issue a final decision on the pending permit application that exempts Avenal from these additional requirements.

8. EPA intends to issue a supplemental public notice that will request comment on EPA's proposal to approve Avenal's application without requiring a demonstration that this source will not cause a violation of the hourly NO₂ standard. In addition, this notice will also request comment on EPA's proposal not to require this source to meet emissions limitations for greenhouse gases or to demonstrate that the proposed source will not cause or contribute to a violation of the National Ambient Air Quality Standards for hourly concentrations of sulfur dioxide which became effective on August 23, 2010. The notice will also inform interested persons of the opportunity to provide comments on these subjects at a public hearing.

9. As a result of a recent ruling by the EPA Environmental Appeals Board, EPA has also determined that it is necessary to supplement its analysis of whether minority and low income communities may be disproportionately affected by emissions of NO₂ from the Avenal facility. See, *In re: Shell Gulf of Mexico, Inc. and Shell Offshore, Inc.*, OCS Appeal Nos. 10-1 to 10-4, Slip. Op. at 63-81 (EAB December 30, 2010). A copy of this decision may be obtained at

<[http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/OCS+Permit+Appeals+\(CAA\)?OpenView](http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/OCS+Permit+Appeals+(CAA)?OpenView)>.

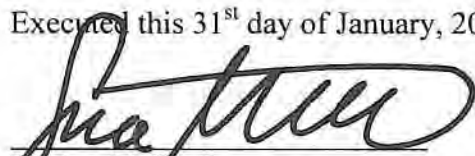
10. EPA is in the process of drafting a supplemental statement of basis to explain its justification for exempting Avenal from these additional requirements described above and to provide a supplemental analysis concerning disproportionate impacts to minority and low income communities. EPA requires an additional 3 weeks to complete this document.

11. Once the document described in paragraph 10 is completed, EPA requires an additional 3 weeks to complete and arrange for publication and direct mail distribution of the public notice. This time is necessary to translate the public notice into Spanish, book the public hearing venue and court reporter to transcribe the hearing, provide advanced copies of the public notice to newspapers for publication, and complete the procurement processes for such services. From the date this notice is published and distributed, EPA will require approximately 5 weeks to complete the public comment and hearing process, in order to allow the 33 days for public comment required by 40 CFR 124.10(b) and 124.20(d) and several additional days for completion of the public hearing. EPA is required to hold a public hearing if requested by any interested person, to provide 33 days notice of such a hearing, and to keep the public comment period open until the hearing concludes. 40 CFR 124.12; 40 CFR 124.10(b)(2); 124.20(d). EPA anticipates based on prior public comments on this permit that a public hearing will be requested. Thus, to expedite the public comment process as much as possible, EPA will provide public notice of the hearing at the same time as public notice of the supplemental statement of basis. In light of the scope of the issues addressed in the supplemental statement of basis, public interest in such matters, and volume of public comments EPA expects to receive, once the comment period ends, EPA will require an additional 6 weeks to consider public comments, prepare responses thereto, and issue a final permit decision in accordance with 40 CFR 124.15.

12. A least four EPA career staff persons and several additional supervisors already familiar with the subject matter are assigned to prepare and review these actions by EPA. The career staff preparing initial drafts of the necessary documents include an Environmental Engineer and Air Permits Manager in EPA's Region 9 office and staff attorneys from both the Region 9 Office of Regional Counsel and the Office of General Counsel at headquarters. At least 5 additional staff and supervisors in Region 9, the headquarters Office of Air and Radiation, and the Office of General Counsel will need to review and approve these actions. The timetable described above cannot be expedited by reassigning additional EPA staff because the time required for such persons to obtain the necessary familiarity with the technical and factual background on this permit application and the issues it presents (and already-assigned staff to train such persons) would offset any benefit from having more manpower involved.

13. After consideration of public comments the Agency may receive in response to this public notice, EPA will be able to complete final action on this permit application by May 27, 2011, as I have previously testified.

Executed this 31st day of January, 2011.


Regina McCarthy

Assistant Administrator
Office of Air and Radiation
United States EPA

PER 000042



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 2011

THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Temporary Delegation of Authority to Authorize Assistant Administrator for the Office of Air and Radiation to Issue Decision on Prevention of Significant Deterioration Permit Application submitted by Avenal Power Center LLC

TO: Gina McCarthy
Assistant Administrator
Office of Air and Radiation

I hereby grant the assistant administrator for the Office of Air and Radiation the authority under section 165 of the Clean Air Act and U.S. Environmental Protection regulations at 40 CFR § 52.21 and 40 CFR Part 124 to issue a final permit decision on the application for a Prevention of Significant Deterioration (PSD) submitted to the EPA in February 2008 by Avenal Power Center LLC. This application seeks a permit to construct a 600 MW (net) electric generating facility in Kings County, California, consisting of two GE 7FA combustion turbines generators, two heat recovery steam generators, one steam turbine generator and associated equipment.

As to the procedures in 40 CFR Part 124, this delegation authorizes the assistant administrator for the Office of Air and Radiation to exercise authority applicable to PSD permit applications that is assigned to the regional administrator under the terms of 40 CFR Part 124. This includes the authority to issue a final permit decision under section 40 CFR § 124.15 and to take any other action assigned to a regional administrator under Part 124 that the assistant administrator determines is necessary to reach a final permit decision on the permit application described above. This delegation does not authorize the assistant administrator for the Office of Air and Radiation to exercise authority provided in section 124.19 of the regulations to consider any petition for review of the final permit decision, but authorizes the assistant administrator to publish notice of final agency action pursuant to section 124.19(f)(2).

This temporary delegation of authority will remain in effect for one year from the date of approval unless extended or superseded by a subsequent delegation(s). This authority may not be redelegated further.

References: Delegation 7-24.

A handwritten signature in blue ink, appearing to read "L. Jackson".

Lisa P. Jackson

**Supplemental Statement of Basis
PSD Permit Application for Avenal Energy Project
March 2011**

EPA is supplementing its Statement of Basis for this application for a Clean Air Act Prevention of Significant Deterioration (PSD) permit to address several considerations that have arisen since the close of the comment period on this permit. Due to the fact that Avenal's permit application was complete and a proposed permit issued in advance of EPA's proposal of certain recently-promulgated regulations establishing new and additional requirements and other compelling factors, EPA has tentatively determined that it should grandfather this permit from those requirements, i.e., not require a demonstration of compliance with those requirements for this permit. Furthermore, EPA has determined that it is appropriate to provide a detailed Environmental Justice Analysis regarding its proposed PSD permit action for this facility for public comment. The proposed facility, called the Avenal Energy Project (Project) by the permit applicant, Avenal Power Center, LLP (APC), will be located in Kings County, California, and consists of two GE 7FA combustion turbine generators, two heat recovery steam generators, one steam turbine generator, and associated equipment. The proposed location for the Project constitutes the majority of the northeast quarter of Section 19, Township 21 South, Range 18 East, Mt. Diablo Base and Meridian. The Kings County Assessor's Parcel Number (APN) for this location is 36-170-035. The geographic coordinates for the proposed location are Latitude 36.088394° N and Longitude 120.061141° W. The proposed location is currently in agricultural production, is zoned industrial by the City of Avenal and is owned by the applicant. The City of Avenal has informed the EPA that the unofficial address for this location's APN is 33119 Avenal Cutoff Road, Avenal, California 93204. EPA Region 9 first received the application for this permit in February 2008 and notified the applicant on March 19, 2008 that its permit application was complete,¹ in accordance with the procedure described in EPA regulations. 40 CFR 124.3(c).

On June 16, 2009, EPA Region 9 issued for public comment a proposed permit for the Project, which would grant conditional approval, in accordance with the PSD regulations, to APC to construct and operate a 600 MW (net) electric generating facility, along with a statement of basis and ambient air quality impact report describing the basis for the permit conditions and other related information. The proposed PSD permit requires the use of Best Available Control Technology (BACT) to limit emissions to the greatest extent feasible of carbon monoxide (CO), oxides of nitrogen (NO_x), particulate matter (PM), and particulate matter less than 10 micrometers in diameter (PM₁₀). The area in which this facility will be located is in attainment with the National Ambient Air Quality Standards (NAAQS) for these pollutants, as well as sulfur dioxide (SO₂) and lead. We note that the area where this facility will be located is not meeting the NAAQS for ozone and particulate matter less than 2.5 micrometers in diameter (PM_{2.5}). The emissions from the proposed project of the air pollutants (including precursors to the formation of these pollutants) for which the relevant area is not attaining the NAAQS are regulated under the Nonattainment New Source Review permitting program administered by the San Joaquin Valley Air Pollution Control District (District).

¹ Under 40 CFR 52.21(b)(22), "[c]omplete means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application."

EPA provided public notices requesting public comment on the proposed permit for the Project on June 16, 2009, August 27, 2009 through August 29, 2009, and September 11, 2009. The August and September 2009 notices announced that EPA would extend the public comment period and hold a public information meeting and two public hearings in conjunction with its proposed PSD permit for the Project. The public information meeting and two public hearings were held as scheduled, and the public comment period for the proposed permit closed on October 15, 2009.

In parallel with this process required under the Clean Air Act, EPA has taken the steps necessary to ensure its action on this permit application complies with section 7 of the Endangered Species Act. EPA requested initiation of consultation with the U.S. Fish and Wildlife Service under section 7 of the ESA on July 10, 2008, and provided additional information requested by the Service on October 22, 2008. The U.S. Fish and Wildlife Service completed its biological opinion concluding the formal consultation process in August 2010.

At this point, the APC permit application has been pending well beyond the one-year deadline by which the Clean Air Act requires EPA to take action to grant or deny this application. The permit applicant has filed a suit in federal District Court to compel EPA to reach a final decision on this permit application. EPA has represented to the Court that it would be able to issue a final permit decision in accordance with 40 CFR 124.15 by May 27, 2011 after taking comment on this supplemental statement of basis.

EPA is providing an additional public hearing and opportunity to comment on this supplemental statement of basis, as described in the associated public notice.

I. Grandfathering From Requirements Established by Recently Promulgated Rules

EPA has determined that it is not appropriate or equitable under the circumstances present here to require this permit applicant to meet certain recently promulgated requirements that have taken effect while EPA has been in the process of reviewing this application. For the reasons discussed below, EPA believes it is authorized to issue a PSD permit to this applicant without requiring a demonstration that the source will not cause or contribute to a violation of the nitrogen dioxide (NO₂) or sulfur dioxide (SO₂) NAAQS for the one-hour averaging time or a showing that this source will meet the BACT requirement for greenhouse gases.

In 2010, EPA completed a series of regulations that established additional standards and criteria applicable to the review and issuance of permits to construct or modify major stationary sources of air pollution under the PSD program. The relevant regulations include NAAQS for hourly concentrations of NO₂ and SO₂ and limitations on greenhouse gas emissions from light duty vehicles. EPA first proposed these regulations in July 2009, December 2009, and September 2009 respectively. Under EPA's interpretation of applicable statutes and regulations, these new regulations created additional standards and criteria that became applicable to the review and issuance of PSD permits when the new regulations became effective. This is because the criteria for issuance of PSD permits include requirements that a source demonstrate it will not cause or contribute to a violation of any NAAQS and that the proposed source will meet

emissions limitations achievable through application of BACT for each pollutant subject to regulation under the Clean Air Act (“the Act”). 42 U.S.C. 7475(a)(3)-(4); 40 C.F.R. 52.21(k); 40 C.F.R. 52.21(b)(12); 75 Fed. Reg. 17004 (April 2, 2010). When completing the regulations to establish NAAQS for hourly NO₂ and SO₂ concentrations and the limitations on greenhouse gas emissions from light duty vehicles, EPA did not adopt transitional provisions in the PSD regulations to grandfather any permit applications that were pending at the time the new requirements took effect.

Nevertheless, EPA has determined in this case that it should not apply the criteria and standards described in the preceding paragraph to the APC permit application under the circumstances that are presented here. EPA first proposed the hourly NO₂ standard more than a year after the time that EPA determined APC’s PSD permit application was complete. Indeed, EPA had issued a proposed PSD permit for the project prior to the proposal date of the NAAQS standard. At this point, the APC permit application has been pending for nearly two years beyond the statutory deadline by which EPA was required to make a decision to grant or deny this application. This delay has been exacerbated by the need for APC to conduct an analysis to show that the proposed APC facility will not cause a violation of the hourly NO₂ NAAQS, in accordance with EPA previously announced interpretation of the PSD regulations. In consideration of EPA’s statutory obligation to take action on this permit application in a timely manner, the nature of the source APC seeks to construct, and the factors that have contributed to the extended delay in this case, EPA does not believe it is appropriate or equitable at this point to require that APC demonstrate compliance with the hourly NO₂ NAAQS or additional requirements that have taken effect during the extended delay that has resulted from EPA’s prior interpretation that APC should make such a showing before EPA could grant the permit application.

A. Substantive and Procedural Requirements Applicable to PSD Permitting

Section 165 of the Act (42 U.S.C. § 7475) and EPA’s implementing regulations (40 C.F.R. § 52.21; 40 C.F.R. Part 124) contain both substantive and procedural requirements that must be satisfied before a PSD permit may be issued to authorize construction or modification of a major stationary source of air pollutants. When EPA promulgates a new NAAQS and completes rules that make an additional pollutant subject to regulation under the Act,² the Agency must take care to ensure that PSD permit decisions are made in accordance with both the substantive and procedural requirements of the Act and EPA’s implementing regulations.

NAAQS Compliance

Among the substantive requirements, the Clean Air Act and PSD regulations provide that a permit may not be issued unless the applicant demonstrates that the source will not cause or contribute to a violation of “any NAAQS.” 42 U.S.C. § 7475(a)(3); 40 C.F.R. 52.21(k). This requirement does not apply to any NAAQS for which the area in which the source proposes to locate is designated non-attainment. 40 C.F.R. 52.21(i)(2). EPA has previously explained that, as a general matter, each decision to issue a PSD permit should be supported by a record

² Such pollutants are defined in EPA regulations as a “regulated NSR pollutant.” 40 C.F.R. § 52.21(b)(50).

showing that the applicant will not cause or contribute to a violation of any NAAQS (except one for which the area is designated nonattainment) that is effective on or before the date that the permit is issued. On April 1, 2010, the Director of EPA's Office of Air Quality Planning and Standards issued a memorandum reminding Regional Offices that EPA interprets the phrase "any NAAQS" contained in the PSD provisions of the Act and EPA regulations to cover any NAAQS in effect at the time of a final permit decision. The memorandum cited prior instances where EPA has applied this interpretation, including one where EPA also issued a rule to grandfather some pending applications from the requirement to show the source would not violate the NAAQS for PM10. 52 Fed. Reg. 24672 (July 1, 1987). The April 2010 memorandum said the following:

[P]ermits issued under 40 CFR 52.21 on or after April 12, 2010, must contain a demonstration that the source's allowable emissions will not cause or contribute to a violation of the new 1-hour NO₂ NAAQS. ... There are no exceptions under 40 CFR 52.21 in this case because as noted above, EPA has not adopted a grandfathering provision applicable to the 1-hour NO₂ NAAQS that would enable the required permit to be issued to a prospective source.

One day later, EPA also addressed this subject in the context of a final decision published in the Federal Register on the topic of the pollutants subject to the requirements of the PSD program. 75 Fed. Reg. 17004 (April 2, 2010). This document said the following:

EPA generally interprets a revised NAAQS that establishes either a lower level for the standard or a new averaging time for a pollutant already regulated to apply upon the effective date of the revised NAAQS. Thus, unless EPA promulgates a grandfathering provision that allows pending applications to apply standards in effect when the application is complete, a final permit decision issued after the effective date of a NAAQS must consider such a NAAQS.

Id. at 17008.

Best Available Control Technology

PSD permit applicants must also show that the proposed source will meet an emissions limitation based on application of BACT for each pollutant subject to regulation under the Act. 42 U.S.C. 7475(a)(4). As discussed in EPA's final action entitled "Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs," EPA construes the BACT requirement to apply to each pollutant that is subject to regulation under the Act at the time a PSD permit is issued. 75 Fed. Reg. 17004 (April 2, 2010). In this April 2010 action explaining EPA's decision to continue following a legal interpretation established in a December 2008 memorandum from the Administrator ("PSD Interpretive Memo"), EPA identified January 2, 2011 as the date when greenhouse gases would first become subject to regulation under the Act. January 2, 2011 is the date when the first regulatory requirement to control emissions of greenhouse gases under the Clean Air Act takes effect under the Light Duty Vehicle Rule that EPA completed on May 7, 2010. 75 Fed. Reg. 25324. EPA proposed the vehicle rule on September 28, 2009.

EPA also explained in the April 2, 2010 final action described above that the Agency did not “see any grounds to establish a transition period for permit applications that are pending before GHGs become subject to regulation.” Id. at 17021. EPA did not see a basis to promulgate a grandfathering provision for greenhouse gases because permit applications pending prior to April 2, 2010 already had a transition period of nine months in which the permit could be issued without addressing the BACT requirement for greenhouse gases. For permits that could not be issued in that nine-month period, EPA believed that it would be feasible to begin incorporating greenhouse gas considerations into permit reviews in parallel with completion of work on other pollutants. EPA also observed that permit applicants had notice that greenhouse gases would become subject to regulation for purposes of the PSD program upon completion of the light duty vehicle standards. Thus, the Agency said in April 2010 that “EPA does not intend to promulgate a transition or grandfathering provision that exempts pending permit applications from the onset of GHG requirements in the PSD program.” EPA also explained that “in the absence of such a provision, PSD permits that are issued on or after January 2, 2011 ... will be required to contain the provisions that fulfill the applicable program requirements for GHGs.” Id. at 17022. In June 2010, EPA affirmed that it did not intend to adopt a grandfathering provision for greenhouse gases when the Agency completed the PSD and Title V Greenhouse Gas Tailoring Rule. 75 Fed. Reg. 31514, 31592-93 (June 3, 2010).

Timely Permit Review

The Act also requires that permitting authorities complete review of PSD permit applications in a timely manner. Section 165(c) of the Act specifies that “[a]ny completed permit application under section 7410 of this title for a major emitting facility in any area to which this part applies shall be granted or denied not later than one year after the date of filing of such completed application.” 42 U.S.C. § 7475(c). EPA should be mindful of this obligation when establishing new regulations that affect the requirements applicable to PSD permit applications, especially applications that are in process at the time additional requirements become effective.

Under certain circumstances EPA has previously established transition provisions which relieved persons proposing new major sources and major modifications that have submitted a complete PSD permit application from having to amend applications to demonstrate compliance with the new PSD requirements. For example, EPA adopted such a provision to address the transition from the TSP NAAQS to the PM₁₀ NAAQS. See, 40 CFR 52.21(i)(1)(x). EPA adopted similar provisions pertaining to new or revised PSD increments for NO₂ and particulate matter. 40 CFR 52.21(i)(9)-(10). Permit applicants meeting the eligibility criteria in these provisions were grandfathered from the new PSD requirements that otherwise would have applied to them.

B. Grounds for Grandfathering this Permit Application from New Requirements

In order to balance EPA’s statutory obligations to issue permits in a timely manner and in accordance with the substantive requirements of the Act, EPA is proposing to issue a PSD permit to APC without requiring a showing that this source will not cause or contribute to a violation of

the hourly NO₂ and SO₂ NAAQS or establishing emissions limitations for greenhouse gases in the permit. This determination is based on the following factors that are discussed in more detail below:

(1) The facility that APC proposes to construct will be a well-controlled, natural-gas fired electric generating facility that will apply BACT for NO₂ and not cause or contribute to a violation of the NAAQS that were in place before promulgation of the hourly standards;

(2) APC's permit application was deemed complete by EPA more than a year before, and EPA had issued a proposed permit for the project one month before, the date on which EPA proposed the hourly NO₂ NAAQS.

(3) Unanticipated challenges with the preparation and review of sufficient information to predict the impact of proposed sources on hourly NO₂ concentrations were not apparent when EPA determined there was no need to establish a grandfathering provision for this requirement and others that followed.

(4) The challenges encountered in supplementing the APC permit application to address the hourly NO₂ NAAQS caused additional delay beyond the dates when the hourly SO₂ NAAQS and greenhouse gas requirements became applicable to PSD permit applications.

(5) Court decisions recognize an exception, in cases of significant delay by the administrative agency, to the general rule that an administrative agency should apply the law in effect at the time its issues a permit or license.

Considering these factors and EPA's statutory obligations to complete action on this permit in a timely manner, EPA believes there is cause to grandfather this permit application from the identified requirements in order to reconcile competing obligations under the Clean Air Act and achieve an equitable outcome.

Projected Emissions from the APC Facility

The facility that APC seeks authorization to construct is a state-of-the-art natural-gas fired electric generating facility that will achieve the lowest levels of air pollutant emissions achievable in this instance. The proposed PSD permit requires the use of BACT to limit emissions of carbon monoxide (CO), oxides of nitrogen (NO_x), particulate matter (PM), and particulate matter less than 10 micrometers in diameter (PM₁₀). *See*, Statement of Basis and Ambient Air Quality Impact Report, Section 7, pp. 15-23 (June 2009)

The record for this permit demonstrates that the source will not cause or contribute to a violation of any NAAQS regulated under the permit that was in effect at the time EPA issued a proposed permit for this project. EPA has determined from the modeled results for the facility that the Project impacts are well below (in all cases, less than 6 percent of) the applicable NAAQS for the PSD pollutants addressed in the PSD permit. The maximum modeled impact of NO₂ for the annual averaging period is 0.5 µg/m³, less than 1 percent of the NAAQS of 100

µg/m³. The modeled PM₁₀ impact (24-hour averaging period) is 2.9 µg/m³, approximately 2 percent of the PM₁₀ 24-hour NAAQS of 150 µg/m³. The modeled CO impact for the 8-hour averaging period is 337 µg/m³, less than 4 percent of the NAAQS of 10,000 µg/m³, and the modeled CO impact for the 1-hour averaging period is 2,175 µg/m³, less than 6 percent of the NAAQS of 40,000 µg/m³. *See*, Statement of Basis and Ambient Air Quality Impact Report, Section 8, pp. 24-27 (June 2009); 40 C.F.R Part 50.

Proposal of Hourly NO₂ NAAQS After Application Completed

At the time its permit application was deemed complete, Avenal did not have notice of the potential for the hourly NO₂ NAAQS requirement to become applicable when its permit application was completed. EPA declared the Avenal PSD permit application complete in March 2008. EPA proposed the hourly NO₂ NAAQS over a year later on July 15, 2009.

Complications with Implementation of Hourly NO₂ NAAQS

EPA issued the hourly NO₂ NAAQS on February 9, 2010 and established that this standard would become effective on April 12, 2010. At that time, EPA did not consider adopting a transitional provision for pending permit applications completed prior to this date. EPA expected that permit applicants would readily be able to determine, based on existing EPA modeling guidelines, how to expeditiously complete the analysis necessary to show that stationary source construction would not cause or contribute to violations of the hourly NO₂ NAAQS. However, some PSD permit applicants have experienced unforeseen challenges with the preparation of sufficient information to predict the impact of the proposed source on hourly NO₂ concentrations in accordance with PSD modeling guidelines.

EPA has approved the air quality dispersion model known as AERMOD for use in several regulatory applications, including use by permit applicants to demonstrate that the sources they propose to build will not cause or contribute to violations of the hourly NO₂ standard. On February 25, 2010, before the hourly NO₂ standard became effective, EPA issued a Notice Regarding Modeling for New Hourly NO₂ NAAQS, which explained that the current AERMOD model should be used in accordance with established guidelines on the application of this and other air quality models contained in 40 C.F.R. Part 51, Appendix W. In addition, after the hourly NO₂ NAAQS became effective, EPA issued two additional guidance memoranda on June 28, 2010. One of those memoranda, entitled “*Applicability of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard*,” provided additional technical guidance on using AERMOD to demonstrate that proposed construction of a stationary source will not cause or contribute to a violation of the hourly NO₂ standard. EPA believed these actions would be sufficient to enable all permit applicants, including those with applications pending on April 12, 2010 when the NO₂ NAAQS became effective, to complete appropriate modeling of hourly NO₂ concentrations.

Despite these actions by EPA, some applicants seeking PSD permits to construct or modify stationary sources of air pollution have experienced unforeseen challenges with the timely preparation of sufficient information to demonstrate that the proposed construction will not cause or contribute to violations of the hourly NO₂ NAAQS. These challenges have

resulted from the fact that to address the hourly NO₂ NAAQS, many permit applicants need to conduct a cumulative air quality impact assessment. This has also necessitated the application of modeling techniques that are more refined than those that have previously been adequate to demonstrate compliance with the annual NO₂ standard. These refined modeling techniques require consideration of the chemical transformation of NO_x emissions through the Ozone Limiting Method or Plume Volume Molar Ratio Method under the third and most-refined Tier of EPA's modeling guidelines applicable to NO₂. Additional refinements in the determination of background concentrations based on modeling of nearby sources and ambient monitoring data may also be necessary in many cases. This level of refinement requires acquisition and analysis of additional data inputs that are available but not as readily accessible to permit applicants as has been the case with other data used in air quality modeling for annual NO₂ concentrations. Permit applicants and permitting authorities have needed more time than EPA expected to develop familiarity with these refined approaches and to obtain and analyze the necessary data.

Due in part to these complications, APC's efforts to complete a sufficient modeling demonstration to show this source will not cause or contribute to violations of the hourly NO₂ standard has produced unanticipated delays in the review of the PSD permit application submitted by APC. This has exacerbated EPA's failure to comply with the statutory deadline for action on this permit application. The potential for such a circumstance to arise was not apparent when EPA completed the hourly NO₂ NAAQS without grandfathering pending PSD permit applications at that time.

Greenhouse Gas Requirements

When EPA completed the reconsideration of the PSD Interpretive Memo in April 2010 and identified the date on which greenhouse gases would become subject to regulation, the Agency's conclusion that it would not be necessary to establish a transitional provision for the PSD requirements applicable to greenhouse gases was informed by the assumption that permits pending as of April 2010 would reasonably be expected to be issued within the next nine months. Thus, when EPA concluded that the approximately nine months remaining until January 2, 2011 was a sufficient transition period for completing action on most pending permit applications without having to address the greenhouse gas requirements, EPA had not considered the potential delays that would result for long-pending complete permit applications such as APC's from completion of modeling to address the hourly NO₂ NAAQS. Since these delays have prevented EPA from issuing a final decision on the APC permit application by January 2, 2011, EPA believes it is appropriate to grandfather this permit from the greenhouse gas requirements. If not for the delays associated with addressing the hourly NO₂ NAAQS requirements, EPA would have completed action on the APC permit application prior to January 2, 2011 and the application would not have been subject to the greenhouse gas requirements. The limited grandfather from the GHG requirements that EPA is applying in this case is justified to provide this permit applicant with the benefit of the 9-month transitional period EPA identified in April 2010 before the complications associated with implementing the hourly NO₂ NAAQS in the PSD permitting program became apparent.

Hourly SO2 NAAQS

On June 22, 2010, EPA published a final rule establishing a primary SO₂ NAAQS based on a 1-hour averaging time. 75 Fed. Reg. 35,520 (Jun. 22, 2010). That rule became effective on August 23, 2010. EPA first proposed this standard on December 8, 2009, more than 20 months after EPA determined Avenal's application was complete. As with the greenhouse gas requirement, the Agency's decision not to establish a transitional provision for the hourly SO₂ NAAQS was informed by the assumption that an hourly NO₂ NAAQS modeling demonstration could be completed more expeditiously than has proven to be the case for the APC permit. EPA did not anticipate that delays in completing modeling for the hourly NO₂ NAAQS would impede EPA's ability to complete action on the long-pending complete permit applications such as APC's before the hourly SO₂ NAAQS became effective on August 23, 2010. Similar to the situation described above with respect to greenhouse gases, EPA would have been able to complete action on this permit application before August 23, 2010 if it had not requested additional information from Avenal to address the hourly NO₂ NAAQS and experienced the complications described.

Although these considerations support grandfathering this permit application from the hourly SO₂ NAAQS, we note that because of the low SO₂ emissions from this facility, EPA regulations do not require additional analysis to demonstrate that this source will not cause a violation of the hourly SO₂ NAAQS. The Project's SO₂ emissions are estimated to be 16.7 tons per year. Since this is well below the 40 tons per year significant emissions rate for SO₂, additional analysis is not required from APC. See 40 C.F.R. §§ 52.21(m)(1) and 52.21(b)(23)(i). Sources with emissions below these levels are considered to have a negligible or "de minimis" impact on air quality that would not cause or contribute to violation of the NAAQS for the pollutant in question. Thus, further analysis is not required under EPA regulations.

Judicial Decisions Support Grandfathering the Permit Application from New Requirements in this Case

EPA's proposed action to grandfather this permit application that has been pending for well beyond the statutory deadline for action is supported by judicial opinions that have addressed analogous circumstances involving a change in legal requirements while action on an application for a government approval was unduly delayed. In the April 2010 interpretive statements described above, EPA relied on judicial opinions supporting the general principle that a decision on an application for a government license, permit, or other type of authorization must be based on the law in effect at the time of the decision of the reviewing authority. See *Ziffrin, Inc. v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1108 (5th Cir. 1977). However, some courts have also recognized an exception to this principle in circumstances where there has been a significant and prejudicial delay by the government agency reviewing an application. These courts have extended to actions by government agencies a principle that courts sometimes apply when they themselves are unable for various reasons to issue decisions in a timely manner. The judicial principle has been expressed by the Supreme Court as follows:

where the delay in rendering a judgment or a decree arises from the act of the court, that is, where the delay has been caused either by the convenience, or by the multiplicity or press of business, either the intricacy of the questions involved, or of any other cause not attributable to the laches of the parties, the judgment or decree may be entered retrospectively, as of a time it should or might have been entered up.

Mitchell v. Overman, 103 U.S. 62, 64-65 (1880). This principle is sometimes identified by the Latin maxim *actus curiae neminem gravabit*.

In one such case applying this principle to action by a government agency, an individual had applied for U.S. citizenship under a statute that expired before the government acted on his application. The court held that the individual was entitled to have his petition for naturalization granted under the expired law because of the government's delay in the approval of his application. *Application of Martini*, 184 F.Supp. 395, 401-402 (S.D.N.Y. 1960). That court opinion applies the judicial principle described above "to the delay caused by administrative inaction." 184 F.Supp. at 401-402. The United States Court of Appeals for the Second Circuit later observed that the above case and others had applied this principle to "situations involving prejudicial delays in the administrative proceedings." *Fassilis v. Esperdy*, 301 F.2d 429, 434 (2d Cir. 1962). However, the Second Circuit actually declined to reach the same result in the absence of a similar showing of delay. *Id.* This opinion of the Second Circuit followed the general principle described in *Ziffrin Inc. v. United States*, 318 U.S. 73 (1943) that an administrative agency should apply the law in effect at the time of its final decision on an application. Nevertheless, the Second Circuit case did not question the earlier decisions that applied an exception to this principle where there has been a meaningful delay by an administrative agency. *Id.* at 434. Although the Second Circuit upheld several denials of applications for permanent residency status based in part on a change in law that occurred during administrative appeals of the denials, this result was based on the court's conclusion that there were "no substantial delays on the part of the administrative agency which operated to deprive the applicants of any right to which any of them was entitled." *Id.* Thus, the *Fassilis* opinion appears to confirm the viability of the principle applied in the *Martini* case where there has been a significant delay by an administrative agency.

Together, the above cases support the view that an administrative agency has the power in limited and compelling circumstances to issue a permit decision based on the legal requirements that were applicable at the time the Agency should have taken action.

Conclusion Regarding Grandfathering

Notwithstanding these considerations, EPA must also ensure compliance with the substantive requirements of the Clean Air Act. The Act does not expressly authorize EPA to waive the substantive permitting criteria when a permit application has not been granted or denied within the one-year deadline. Thus, EPA must consider how to reconcile what have now become conflicting statutory obligations because of the delays in processing this permit application. Given the ambiguity in the Act on this point, EPA has the discretion to apply a permissible interpretation of the Act that balances the requirements in the Act to make a decision

on a permit application within one year and to ensure that new and modified sources will only be authorized to construct after showing they can meet the substantive permitting criteria. Given the nature of the facility APC proposes to construct, the fact that EPA proposed the hourly NO₂ NAAQS more than a year after Avenal's application was complete and after EPA had proposed to approve it, the delay in processing this application that resulted from promulgation of this standard, and the judicial precedent described above, EPA believes it is appropriate to reconcile these competing legal obligations by not requiring that APC show it will not cause or contribute to a violation of the one-hour NAAQS for NO₂ and SO₂ or that this facility will be capable of meeting emissions limitations for greenhouse gases based on the BACT requirement.

Although EPA previously issued interpretive statements that suggest grandfathering is not permissible in any circumstance absent an express grandfathering provision in the regulations, this previous interpretation should not apply to the circumstances present here. In making those prior statements, EPA had not sufficiently considered the judicial decisions described above and the present circumstances where several factors have combined to cause a delay of EPA's action on the APC permit nearly two years beyond the statutory deadline. In light of these circumstances and the extended delay of EPA's action on the APC permit application attributable to the challenges experienced in attempting to address the hourly NO₂ NAAQS, EPA reads the law to allow EPA to issue this permit application based on the criteria and standards applicable to PSD permit decisions prior to the effective date of the hourly NO₂ NAAQS.

The previous interpretive statements discussed above were reflected in actions of officials from EPA's headquarters offices. In order to effectuate the refinement of the previous Agency interpretations described above and to facilitate issuance of this permit, EPA's Assistant Administrator for Air and Radiation is issuing this statement of basis and intends to issue the final permit decision for the APC permit application after consideration of any public comment that may be submitted on this action. This action is authorized under a special delegation from the EPA Administrator contained in the administrative record.

II. Environmental Justice Analysis

Introduction

Executive Order 12898 entitled “Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations” states in relevant part that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Section 1-101 of Exec. Order 12898, 59 Fed. Reg. 7629, (Feb. 16, 1994) “Federal agencies are required to implement this order consistent with, and to the extent permitted by, existing law.” *Id.* at 7632. Based on this Executive Order, the EPA’s Environmental Appeals Board (EAB) has held that environmental justice issues must be considered in connection with the issuance of federal Prevention of Significant Deterioration (PSD) permits issued by EPA Regional Offices and states acting under delegations of Federal authority. *See, e.g., In re Prairie State Generating Company*, 13 E.A.D. 1, 123 (EAB 2006); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 174-75 (EAB 1999) (“Knauf I”). EPA Regional Offices or their delegates in the states have for several years incorporated environmental justice considerations into their review of applications for PSD permits. The EAB reinforced the importance of completing an environmental justice analysis in a recent opinion discussed further below. *See, , In re: Shell Gulf of Mexico, Inc. and Shell Offshore, Inc.*, OCS Appeal Nos. 10-1 to 10-4, Slip Op. at 63-4, (EAB December 30, 2010) (“Shell II”).

During the extended public comment period that EPA provided in 2009 regarding the proposed PSD permit for the Avenal Energy Project (Project), EPA received a number of comments concerning potential impacts on the surrounding communities, and we will respond to those in the Response to Comments that will accompany our final permit decision. For reasons we discuss in detail below, we have prepared this separate Environmental Justice Analysis to address the question of potential impacts of emissions of the air pollutants addressed in EPA’s PSD permit action, and in particular short-term NO₂ exposures. Another environmental justice analysis was conducted, as part of the state permitting and certification process for this Project, that addresses certain other air pollutants, namely ozone and fine particles, and we have summarized the results of that analysis in this document. We note that the local air district permit and the California Energy Commission (CEC)’s certification are the subject of a complaint submitted to EPA under Title VI of the Civil Rights Act.

For purposes of the Executive Order on environmental justice, EPA has recognized that compliance with the applicable NAAQS is emblematic of achieving a level of public health protection that demonstrates that EPA’s issuance of a PSD permit for a proposed facility will not have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. *See e.g., Shell II*, slip op. 74; *In re Shell Offshore Inc.*, 13 E.A.D. 357, 404-5 (EAB 2007) (“Shell I”); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 15-17 (EAB 2000) (“Knauf II”); *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 351 (EAB 1999). This is because the NAAQS are health-based standards, designed to protect public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics. As the EAB recently observed, “[i]n the context of an environmental justice

analysis, compliance with the NAAQS is emblematic of achieving a level of public health protection that, based on the level of protection afforded by the NAAQS, demonstrates that minority or low-income populations will not experience disproportionately high and adverse human health or environmental effects due to exposure to relevant criteria pollutants.” *Shell*, Slip Op. at 73. This is supported by the fact that “[t]he Agency sets the NAAQS using technical and scientific expertise, ensuring that the primary NAAQS protects the public health with an adequate margin of safety.” *Shell II*, Slip Op. at 73.

The studies assessed by EPA in setting NAAQS and the integration of the scientific evidence presented therein have undergone extensive critical review by EPA, the Clean Air Scientific Advisory Committee (CASAC), and the public. Final Rule, 75 Fed. Reg. 6474, 6478 Feb. 9, 2010. “The rigor of the review makes these studies, and their integrative assessment, the most reliable source of scientific information on which to base decisions on the NAAQS.” *Id.* When setting the NAAQS, “[t]he Administrator’s final decisions draw upon scientific information and analysis related to health effects, population exposures, and risks; judgments about the appropriate response to the range of uncertainties that are inherent in scientific evidence and analyses; and comment received from CASAC and the public.” *Id.* at 6483. In light of these characteristics of the process for setting the standards, the EAB generally “relies on and defers to the Agency’s cumulative expertise when upholding a permit issuer’s environmental justice analysis based on a proposed facility’s compliance with the relevant NAAQS in a PSD appeal.” *Shell II*, Slip Op. at 74. The NAAQS are also the underpinning for the State Implementation Plan process, which requires states to adopt rules and programs that will reduce emissions causing air pollution.

Pursuant to Clean Air Act section 165(a)(3), construction of a major emitting facility may not commence until the owner or operator of such facility demonstrates, among other things, that the facility will not cause or contribute to air pollution in excess of any NAAQS applicable to the permit decision. 42 U.S.C. § 7475(a)(3); see also 40 C.F.R. §§ 52.21(k), 52.21(i)(2). EPA proposes to regulate emissions affecting the following NAAQS under the PSD permit: NO₂ (annual average), CO (1-hr and 8-hr average), and PM₁₀ (24-hr). The proposed permit does not contain emission limitations for SO₂ because, as noted above, the Project’s SO₂ emissions are estimated to be 16.7 tons per year, which is well below the 40 tons per year significant emissions rate for SO₂. See 40 C.F.R. §§ 52.21(b)(23)(i); 52.21(j)(2); 52.21(m)(1). EPA has determined that the proposed facility’s projected emissions will not cause or contribute to a violation of the applicable NAAQS, and are, in fact, well below the NAAQS. Indeed, EPA estimated that the projected emissions would be very low – i.e., less than 6% of the applicable NAAQS. Using that information for its environmental justice analysis, EPA has determined that compliance with the applicable NAAQS is indeed sufficient to satisfy the Executive Order as to those regulated pollutants.

Furthermore, Section 165(a) (2) of the CAA provides that a PSD permit may be issued only after “a public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and provide written or oral presentations on the air quality impact of [the proposed] source, alternatives thereto, control technology requirements, and other appropriate considerations.” In light of the Agency’s proposed determination that it should grandfather this permit application from the 1-hour

NO₂ NAAQS, EPA's environmental justice analysis considers "other appropriate considerations" that extend beyond the impacts of the pollutants and NAAQS for those pollutants that are addressed in the PSD permit.

In this case, EPA's environmental justice analysis will consider not only the annual NO₂ NAAQS, which was applicable at the time of the permit application and when EPA issued a proposed permit for the project, but also the potential impacts of the facility on short-term NO₂ concentrations. EPA is examining short-term NO₂ concentrations – even though EPA is proposing not to apply the new one-hour NO₂ NAAQS to this permit application – because the Agency recently determined that the annual NO₂ standard alone is not sufficient to protect public health with an adequate margin of safety against adverse respiratory effects associated with short-term exposures to NO₂. Final Rule, 75 Fed. Reg. 6474, (Feb. 9, 2010). Therefore, EPA's environmental justice analysis considers whether short-term exposures to NO₂ emissions from the Project may result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

The Project is also subject to an air permit issued on November 4, 2008 by the San Joaquin Valley Air Pollution Control District (District), which includes conditions necessary to satisfy the requirements of the Non-attainment New Source Review (NSR) Program under sections 172(c)(5) and 173 of the Clean Air Act. This permit addresses ozone, one of the two air pollutants for which the San Joaquin Valley (Valley) has been designated non-attainment.³ The facility's projected emissions are below the threshold that would trigger non-attainment new source review of the other non-attainment pollutant – PM_{2.5}. The California Energy Commission, in reviewing the permit applicant's Application for Certification relating to the aforementioned District permit, analyzed environmental justice considerations pertaining to, among other things, the proposed siting and emissions profile of the facility. This analysis is contained in the California Energy Commission's Final Commission Decision (08-AFC-1) (December 2009).

The District's action in issuing an NSR permit for this facility and the CEC's action in certifying the Project are the subject of a pending administrative complaint under Title VI of the Civil Rights Act. This complaint, submitted to EPA on October 15, 2009 by Greenaction for Health and Environmental Justice, alleges that the District discriminated against Avenal and Kettleman City residents of color and Spanish-speakers by failing to notify or involve residents during the decision-making process. In addition, the complaint alleges that operation of the proposed Avenal power plant will result in adverse health impacts on the residents of color of Avenal and Kettleman City, who are already impacted by multiple sources of pollution. EPA's Office of Civil Rights has accepted both of these allegations for investigation⁴. By letter dated

³ New source review in non-attainment areas is different from PSD review. Because the area already has air quality that does not meet national health standards, and yet to preserve the ability for economic development to occur in those areas without exacerbating air quality and public health concerns, the Clean Air Act requires that sources seeking to build or expand in a non-attainment area must meet the Lowest Achievable Emissions Rate (LAER) and offset their anticipated new emissions by eliminating emissions of an equal, or depending on the severity of the non-attainment, greater amount. LAER requires a level of emissions reduction, through the use of control technology or other approaches, that is as or more stringent than Best Available Control Technology (BACT), which is required in attainment areas.

⁴ EPA also referred to the US Department of Energy the second allegation as it relates to the actions of the CEC.

August 6, 2010, EPA notified the complainant that it is holding its investigation of the second allegation described above in abeyance because it is not ripe for review while EPA is still considering the PSD permit application.

Project Description and Regulatory Framework

As discussed above, the Avenal Power Center, LLC has applied to EPA for a PSD permit for the Project, a new natural gas fired power plant to be located in Kings County, California, within the San Joaquin Valley Air Pollution Control District, which covers 25,000 square miles and is about 250 miles long from the northern tip of San Joaquin County to the southern tip of Kern County.

Under the Clean Air Act, new sources of pollutants for an area that has been designated attainment or unclassifiable are regulated under the PSD program. In the San Joaquin Valley, these pollutants include NO₂, PM₁₀, SO₂, lead, and CO, and therefore EPA's proposed PSD permit for the Project regulates those pollutants that the facility has the potential to emit in significant amounts. In addition, the facility will emit pollutants for which the San Joaquin Valley has been designated non-attainment. Specifically, the Valley is designated as an extreme non-attainment area for ozone and a non-attainment area for PM_{2.5}. Thus, the non-attainment pollutants subject to NSR permitting by the District include NO_x and VOC as ozone precursors, and PM_{2.5}.⁵ In addition, for power plants over 50 MW, the California Energy Commission (CEC) must issue a license to authorize construction of a proposed power plant. The District issued the non-attainment NSR permit for the facility on October 30, 2008 and the CEC completed its licensing process on December 16, 2009.

The Project is expected to produce approximately 600 megawatts (MW, nominal) net electrical output from natural gas-fired combined-cycle generating equipment. The facility will be operated in combined-cycle mode. Two combustion turbine generators (CTGs) will connect to a dedicated heat recovery steam generator (HRSG), where hot combustion exhaust gas will flow through a heat exchanger to generate steam. The facility will be equipped with natural gas-fired duct burners to augment steam production during peaking operation. Electrical power will be generated from the combustion of natural gas in two 180 MW (nominal) CTGs. Exhaust from each gas turbine will flow through the dedicated HRSG to produce steam to power a shared 300 MW (nominal) Steam Turbine Generator (STG).

The Project will be equipped with state-of-the-art control technology and will be one of the lowest emitting power plants of its kind. Each of the Project's CTGs will be equipped with dry low-NO_x (DLN) combustors. The facility will install selective catalytic reduction (SCR) and oxidation catalyst (Ox-Cat) systems. SCR will be used to reduce NO_x emissions from the combustion turbine generators and the Ox-Cat to reduce emissions of carbon monoxide and volatile organic compounds. Additional equipment includes a natural gas-fired auxiliary boiler equipped with an ultra low-NO_x burner, a natural gas-fired emergency generator equipped with a non-selective catalytic reduction (NSCR) system, and a diesel-fired emergency firewater pump

⁵ The projected PM_{2.5} emissions from the Avenal facility fall below the regulatory threshold for new source review and there are no PM_{2.5} requirements in the District's permit.

engine with a turbo-charger and an inter-cooler/after-cooler. These pollution control technologies are required to meet the Best Available Control Technology (BACT) and Lowest Achievable Emissions Rate (LAER) requirements under the PSD and non-attainment NSR permitting programs.

The facility is expected to have emissions as shown in the following table⁶.

Pollutant	Estimated Annual Emissions (tons/year)	Major Source Threshold (tons/year)	Significant Emission Rate (tons/year)	Does PSD apply?
CO	602.7	100	100	Yes
NO ₂	144.3	100	40	Yes
PM/PM ₁₀	80.7	100	25/15	Yes
SO _x	16.7	100	40	No

EPA's proposed permit includes, among other requirements, 1-hour emissions limits for NO₂, CO, and PM/PM₁₀ on a mass basis as well as 1-hour emissions limits for NO₂ and CO on a concentration basis that meet PSD Best Available Control Technology requirements. Based on the BACT analysis EPA has conducted, the proposed permit requires the most stringent control technology available to reduce NO₂ emissions.

Demographics, Health Data, and Air Quality in the Avenal Area

Description of Local Area

The project would be located on industrial zoned lands administered by the City of Avenal. Currently, the site is in agricultural use. This area is about 6 miles (~9.7 km) from the residential and business centers of the City of Avenal. The topography of the Kettleman Hills divides the populated areas of the City of Avenal from the project site. The City of Huron is located approximately 8 miles (~12.9 km) north of the site and Kettleman City is located approximately 10 miles (~16 km) southeast of the site⁷.

Avenal has a population of 16,236, including 7,000 inmates at Avenal State Prison. Many of the remaining residents either work at the prison or in the agriculture or oil industries. The City of Huron in Fresno County is 9 miles (14.5 km) east of Interstate 5 (I-5) and 3 miles (4.8 km) south of Highway 198. Huron is home to over 7,400 residents and during the harvest season, from April to November, the city's population increases to over 9,000 with an influx of migrant laborers. The local economy is based on agriculture. Kettleman City is a small community with a population of approximately 1,620. The community is located in southern

⁶ The facility is not expected to emit lead.

⁷ Avenal Energy Application to California Energy Commission, Section 6-9, Land Use.

Kings County adjacent to the Interstate 5 freeway and surrounded by agricultural fields, and defunct oil and natural gas extraction operations. A hazardous waste landfill operated by Waste Management, Inc. is located in the Kettleman Hills about 3.5 miles (~5.6 km) southwest of Kettleman City.

Demographic Information

EPA believes an area encompassed by a 25 km radius from the proposed facility is appropriate for this environmental justice analysis as this includes populations of interest in the area that may be impacted by emissions from the Project. Demographic information for areas of 15 and 50 km radii are also provided for comparison. These areas include portions of Kings and Fresno counties. Thus, for health information EPA will present metrics for both Kings and Fresno counties. Relevant areas of comparison include the 8-county area of the San Joaquin Valley and the State of California as a whole.

Demographic information⁸ is captured within three radii surrounding the proposed Avenal Energy Project at 50, 25 and 15km (see Appendix 1).

Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

All three radii capture populations above the state average for percent minority and below the state average for median household income. As the area decreases in size relative to the proposed facility, the percent minority increases. The median household income captured in the 15 km radius is more than \$20,000 below the state average.

EPA's Final Report *Integrated Science Assessment for Oxides of Nitrogen – Health Criteria (ISA)*⁹ discussed below specifically identified children¹⁰ (defined here as under 18 years

⁸ US Census Bureau, 2000 Data, Summary File 3

old) and older adults (65+ years) as being particularly vulnerable to NO₂ impacts. The percentages of children under 18 within the three radii are close to the state average. The percentages of older adults living within the three radii are lower than the state average.

Linguistic isolation¹¹ limits a household's capacity for civic engagement in the regulatory process. All three radii capture households that are above the state average for linguistic isolation. The percent of linguistically isolated households in the State of California is 10% and the percent of households in the 25km radius is 30%.

Education level is another factor that may influence susceptibility and vulnerability to air pollution. Limited formal education is a barrier to employment, health care and social resources, and can increase the risk of poverty, stress, and impacts from environmental stressors. The percent of population without a high school diploma increases the smaller the radius around the facility. Compared to the state average of 23%, the percent of population over 25 years of age without a high school diploma in the 25km radius is 50%. See Appendix 1 for block group maps of each demographic variable described above.

Status of Air Quality in the Area

The San Joaquin Valley is an extreme ozone non-attainment area and a non-attainment area for PM_{2.5}. The area is designated as attainment or unclassifiable for PM₁₀, NO₂, CO, SO₂, and lead. The San Joaquin Valley has some of the highest PM_{2.5} levels in the country.

As discussed in more detail below, EPA recently promulgated a 1-hour NO₂ NAAQS of 100 ppb. EPA has not yet made attainment designations for this new standard. There is limited 1-hour NO₂ monitoring data in California from EPA-approved monitoring network sites. The NO₂ data for the monitoring network for California for 2006-2009 are presented in Appendix 2. The data in the table indicate that the 1 -hour NO₂ monitored design values for 2007-2009 range from 5.1 ppb to 85.5 ppb. The ambient monitoring sites nearest to the Project are the Hanford monitoring site which is 28 miles from the facility, and the Visalia monitoring site which is 46 miles from the facility¹². The NO₂ design value monitored at the Visalia site is 61.3 ppb and for

⁹ Integrated Science Assessment for Oxides of Nitrogen – Health Criteria (Final Report), Section 4.3, U.S. Environmental Protection Agency, Washington DC, EPA/600/R-08/071, 2008.

¹⁰ Children are particularly vulnerable to adverse health effects from air pollution because:

- Children's lungs are still developing. This period of growth and development of the lungs is a critical time period for health effects from exposure to air pollution. Exposures to air pollutants during this time can have life-long effects on the lungs, including lung capacity, the diameter of the airways, and the number and types of cells that line the airways. It is important to note that airways develop through adolescence.
- Children breathe in more air than adults compared to their body weight, leading to a higher dose of air pollution.
- Children's airways are narrower than adults, making them more susceptible to air pollution.

¹¹ A linguistically isolated household is defined by the US Census Bureau as a household in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well." In other words, all members 14 years old and over have at least some difficulty with English.

¹² The Hanford and Visalia monitors are "neighborhood scale," which means that they represent conditions throughout some reasonably homogeneous urban subregion, with dimensions of a few kilometers. These data are useful to the understanding and definition of processes that take periods of hours to occur and hence involve considerable mixing and transport. The monitors therefore do not represent source-specific or peak concentrations.

the Hanford site, 50.0 ppb (61% and 50% of the 1-hour NO₂ NAAQS, respectively). This indicates that background levels at the monitors closest to the facility are on par with measured levels of NO₂ statewide, and that background levels of 1-hour NO₂ in the general area surrounding the facility are not disproportionately high as compared with communities elsewhere in the State.

1-Hour NO₂ National Ambient Air Quality Standard

EPA periodically conducts comprehensive reviews of the scientific literature on health effects associated with exposure to the criteria air pollutants. The NAAQS are set at a level that protects public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics. On January 22, 2010, EPA promulgated a new 1-hour standard for NO₂ to provide increased public health protection from short-term NO₂ exposures that have been linked to respiratory illnesses that lead to emergency room visits and hospital admissions, particularly in at-risk populations such as children, the elderly, and asthmatics. The standard became effective on April 12, 2010.

Sources of NO₂

As noted in the record that accompanied the promulgation of the 1-hour NO₂ standard, NO₂ is emitted by stationary sources such as utilities, industry and other combustion sources. The largest contributor, however, is motor vehicles, and the greatest concern identified in the review of the NAAQS for NO₂ was exposure to short term NO₂ spikes associated with motor vehicle emissions. Nationwide, mobile sources account for 61% of NO_x emissions. In Kings County, the percentage of NO_x emission attributable to mobile sources is 91%.¹³ NO₂ concentrations on or near major roads are appreciably higher than those measured at monitors in the current network. In-vehicle concentrations can be 2-3 times higher than measured at nearby community-wide monitors and near-roadway concentrations have been measured to be approximately 30 to 100% higher than those measured away from major roads. Individuals who spend time on or near major roads can experience short-term NO₂ exposures considerably higher than measured by the current network, which are of particular concern for at-risk populations, including people with asthma, children, and the elderly. As a result, the final NO₂ NAAQS required that new monitors be located near roadways in addition to community scale monitors. Final Rule, 75 Fed. Reg. 6474 (Feb. 9, 2010); 40 CFR Part 58, Appendix D, Section 43.

EPA anticipates NO_x, including NO₂, concentrations, will continue to decrease as a result of state and federal mobile source engine and fuel standards already in effect and being phased in as new vehicles replace older ones. Heavy-duty trucks contributed more than half of the NO_x emissions in Kings County in 2010. The new standards for on-road heavy-duty trucks, which were fully effective with the 2007 and 2010 model years, are anticipated to result in NO_x emissions reductions of almost 60% from these trucks in Kings County by 2020 (see Appendix

Reference: EPA's QA Handbook, Volume II, Appendix E
(<http://www.epa.gov/ttnamti1/files/ambient/pm25/qa/vol2appe.pdf>).

¹³ ARB, CEPAM-2009 Almanac - 2/6/2011), Appendix 1, Table 1: NO_x Emissions Projections - Kings County California.

3). California's in-use truck rule will further reduce emissions from heavy-duty trucks. In addition, new national emissions standards covering many non-road diesel engine categories, including construction and farm equipment, will be fully effective by 2015.

Health Effects Associated with NO₂

EPA's ISA concluded that recent studies provided scientific evidence that NO₂ is associated with a range of respiratory effects. Specifically, these studies provided evidence sufficient to infer a likely causal relationship between short-term NO₂ exposure and adverse effects on the respiratory system.

Evidence from epidemiologic studies shows an association between NO₂ exposure and children's hospital admissions, emergency department visits, and calls to doctors for asthma. NO₂ exposure is associated with aggravation of asthma, including symptoms, medication use, and lung function. Effects of NO₂ on asthma are most evident with a lag of 2-6 days after exposure, rather than same-day levels of NO₂. The relationship in children between hospital admissions or emergency department visits for asthma and NO₂ exposure holds even after adjusting for co-pollutants such as particulate matter and carbon monoxide.

In addition, the ISA concluded that the available evidence on the effects of short-term exposure to NO₂ on cardiovascular health effects is inadequate to infer the presence or absence of a causal relationship at this time. The ISA concluded that the epidemiologic evidence is suggestive but not sufficient to infer a causal relationship of short-term exposure to NO₂ with all cause and cardiopulmonary-related mortality¹⁴.

Impacts of NO₂ on Susceptible and Vulnerable Populations

The NAAQS are intended to provide an adequate margin of safety for both general populations and sensitive subpopulations, for those subgroups potentially at increased risk for ambient air pollution health effects. The term susceptibility generally encompasses innate or acquired factors that make individuals more likely to experience effects with exposure to pollutants.

As stated in the NO₂ ISA at page 4-12:

Persons with preexisting respiratory disease, children, and older adults may be more susceptible to the effects of NO₂ exposure. Individuals in sensitive groups may be

¹⁴ Results from several large U.S. and European multicity studies and a meta-analysis study indicated positive associations between ambient NO₂ concentrations and the risk of all-cause (non-accidental) mortality, with effect estimates ranging from 0.5 to 3.6% excess risk in mortality per standardized increment. In general, the NO₂ effect estimates were robust to adjust for co-pollutants. Both cardiovascular and respiratory mortality were associated with increased NO₂ concentrations in epidemiologic studies; however, similar associations were observed for other pollutants, including PM and SO₂. The range of risk estimates for excess mortality was generally smaller than that for other pollutants such as PM. While NO₂ exposure, alone or in conjunction with other pollutants, may contribute to increased mortality, evaluation of the specificity of this effect was difficult. U.S. EPA. Integrated Science Assessment for Oxides of Nitrogen – Health Criteria (Final Report), Section 4.3. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/071, 2008. Available at: <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=194645#Download>

affected by lower levels of NO₂ than the general population or experience a greater impact with the same level of exposure. A number of factors may increase susceptibility to the effects of NO₂. Studies generally reported a positive excess risk for asthmatics, and there was emerging evidence that [cardiovascular disease] may cause persons to be more susceptible, though it is difficult to distinguish the effect of NO₂ from other traffic pollutants. Children and older adults (65+ years) may be more susceptible than adults, possibly due to physiological changes occurring among these age groups. In addition to intrinsically susceptible groups, a portion of the population may be at increased vulnerability due to higher exposures, generally people living and working near roadways. A considerable fraction of the population resides, works, or attends school near major roadways and likely include a disproportionate number of individuals in groups with higher prevalence of asthma and higher hospitalization rates for asthma (e.g., ethnic or racial minorities and individuals of low socio-economic status). Of this population, those with physiological susceptibility will have even greater risks of health effects related to NO₂.

Next Steps for New NO₂ Health Standard

The 1-hour NO₂ standard became effective on April 12, 2010. As required by the CAA, states will submit recommendations to EPA on which areas do and do not meet the standard, based on air quality monitoring data, and will also identify areas for which sufficient data are not yet available. EPA will review the states' recommendations and finalize designations by January 2012. Concurrently, EPA and the states will enhance the ambient monitoring network to ensure it provides adequate coverage, including for exposure near roadways. This monitoring network is to be in place by January 2013. For areas designated non-attainment, states will be required to develop plans to reduce emissions that are contributing to the high levels, and more stringent new source review will apply. New sources will be required to control emissions to meet the Lowest Achievable Emission Rate and offset any new emissions so that there will be no net increase in emissions in the non-attainment area.

Health Metrics Related to Asthma

The NO₂ ISA specifically identifies persons with preexisting respiratory disease as being at increased risk from NO₂ related adverse impacts. This section presents data on health metrics in Kings and Fresno Counties in California that may be associated with exposures to NO₂.

Respiratory diseases can greatly impair a child's ability to function, and are an important cause of missed school days and limitations to activities. Important respiratory diseases in children include asthma, bronchitis, and upper respiratory infections. In 1994-96, on a national basis, 24 percent of children with asthma had to limit their activities due to their asthma, and the disease caused children to miss 14 million days of school. Studies have shown that outdoor and indoor air pollution causes some respiratory symptoms and increases the frequency or severity of asthma attacks.¹⁵ As noted above, NO₂ exposure is associated with aggravation of asthma.

¹⁵ http://www.epa.gov/economics/children/child_illness/ci-background.html

Asthma Disparities and Income

In California as a whole, asthma disparities exist on the basis of race and ethnicity, age, and income. According to the California Breathing (California Department of Public Health) Report: The Burden of Asthma: A Surveillance Report (2007)¹⁶, lower income is associated with more frequent asthma symptoms and higher asthma hospitalization rates, but slightly lower rates of lifetime asthma prevalence. The report states:

Prevalence of severe symptoms is almost seven times higher among adults with household incomes below \$20,000 compared to adults with household incomes over \$100,000. The rate of asthma hospitalizations is three times higher among people living in areas where the median income is less than \$20,000 compared to people living in areas where the median income is greater than \$50,000. Additionally, people with more repeat asthma hospitalizations come from areas with a lower median income.

Hospitalizations and Emergency Department Visits

The tables below compare the age-adjusted rates for asthma hospitalizations and asthma related emergency department visits in Kings and Fresno Counties versus the State of California and are tracked by the California Environmental Health Tracking Program¹⁷.

2009 Asthma Hospitalizations by Race and Ethnicity

The rate of asthma hospitalizations for children in Fresno and Kings Counties aged 0 – 4 is significantly higher than the rate for California as a whole. Hospitalizations due to asthma for non-Hispanic white children age 0 – 4 in California number 19 per 10,000, compared to 42 and 28, respectively, for non-Hispanic white children in Fresno and Kings Counties. Hospitalizations due to asthma for African-American children age 0 – 4 in California number 55 per 10,000, compared to 75 for African-American children in the same age group in Fresno County (data not available for Kings County). Hospitalizations due to asthma for Latino children age 0 – 4 in California number 21 per 10,000, compared to 45 and 29 (similar to non-Hispanic white children) for Latino children in Fresno and Kings Counties, respectively.

¹⁶ <http://www.californiabreathing.org/phocadownload/asthmaburdenreport.pdf>

¹⁷ The California Environmental Health Tracking Program provides data for two asthma indicators: asthma hospitalizations and asthma-related emergency department visits. A careful evaluation of asthma in a particular community requires review of both asthma-related emergency department (ED) visits and asthma-related hospital admissions because when a patient goes to the emergency room with asthma, sometimes they are treated in the emergency department and discharged and sometimes they are admitted to the hospital. An asthma-related hospital admission is identified by looking at hospitalization data and selecting the admissions that had an asthma diagnosis. Hospitalization represents people with severe asthma who end up being hospitalized for their asthma. An asthma-related emergency department (ED) visit is measured by examining hospital records on ED visits and identifying the visits that had an asthma diagnosis. Some ED visits may result in a hospitalization. Emergency department visits represent people with asthma who end up at the emergency department (ED) or utilize urgent care services for treatment of asthma symptoms. This may be because they have been unable to manage their asthma properly or they lack access to a primary health care provider. California Environmental Health Tracking Program, http://www.ehib.org/project.jsp?project_key=ehss01

Age Adj Rate, per 10,000 persons 2009 ^b	Total		Black		Hispanic ^a		White		Asian/ Pacific Islander	
	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c
U.S.	Comparable national data for emergency department visits are not readily available, however the <i>California Breathing Report</i> notes that California hospitalization rates are consistently around 1.5 times lower than overall U.S. rates.									
CA	9.42	22.71	29.65	55.38	9.31	20.82	7.90	19.15	6.56	17.73
Fresno County	12.5 ^d	49.34 ^d	31.91	75.48	11.44 ^d	45.28 ^d	11.60 ^d	42.47 ^d	8.91 ^d	48.79 ^d
Kings County	10.78 ^d	31.22 ^d	18.54	NA	12.77 ^d	29.56 ^d	8.93 ^d	28.17 ^d	NA	NA

a. Includes Puerto Ricans

b. 2009 Data, from California Environmental Health Tracking Program, <http://www.ehib.org/>

c. Children 0-4 years old

d. This rate is statistically significantly higher than the rate for the State of California for the same ethnic/age group

2009 Asthma Emergency Department Visits by Race and Ethnicity

For asthma-related Emergency Department visits, the rates for Fresno and Kings Counties are higher than the rate for the State of California, and the difference is statistically significant when compared across any of the following: the entire population, the Latino population, children under 4, and adults aged 65 and older. Latino children age 0 – 4 in Fresno and Kings Counties, as compared to all Latino children age 0-4 in the State of California have almost double the rate of emergency department visits: 200 and 193, respectively, per 10,000, versus 107. For African-American children in the same age group, the difference is similarly striking: 409 and 536 for Fresno and Kings Counties, respectively, per 10,000 visits, versus 333 for all African American children age 0-4 in the State.

Age Adj Rate, per 10,000 persons 2009 ^b	Total		Black		Hispanic ^a		White		Asian/ Pacific Islander	
	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c	All Ages	Children ^c
U.S.	Comparable national data for emergency department visits are not readily available.									
CA	47.99	109.92	163.05	332.95	44.53	107.66	40.36	79.52	18.68	50.93
Fresno County	68.04 ^d	216.14 ^d	180.02 ^d	409.06 ^d	61.62 ^d	200.06 ^d	65.90 ^d	167.17 ^d	25.44 ^d	123.86 ^d
Kings County	71.24 ^d	196.01 ^d	146.99	536.51 ^d	73.28 ^d	193.35 ^d	61.98 ^d	133.80 ^d	NA	NA
Avenal	26.3 ^c	NA	NA	NA	NA	NA	NA	NA	NA	NA

Kettleman City	35.75 ^e	NA	NA	NA	NA	NA	NA	NA	NA	NA
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- Includes Puerto Ricans
- 2009 Data, from California Environmental Health Tracking Program, <http://www.ehib.org/>
- Children 0-4 years old
- This rate is higher than the rate for the State of California for the same ethnic/age group.
- Data from 2005-2007 California Office of Statewide Health Planning and Development (OSHPD) Patient ED Database. Numerator for rates is ED visits with a principal diagnosis using ICD-9 code 493. Denominator for Kettleman City and Avenal rates is the estimated number of residents from the ESRI Community Sourcebook of Zip Code Demographics.¹⁸

Asthma Prevalence in Kings and Fresno Counties

Data from the California Department of Public Health's "California Breathing" program are based on 2007 information. These data show a lifetime prevalence of 24% among Kings County children age 0-17, second highest in the State, and a prevalence of 19.2% for Fresno County, as compared to the statewide prevalence for the same age group of 15.4%¹⁹. In addition, according to the Kings County Health Status Report,²⁰ asthma prevalence has been increasing in recent years.

2007 Lifetime Asthma Prevalence by Race and Ethnicity

In Percents	Total		Black		Hispanic ^a		White		Asian/ Pacific Islander		Family Income Below Poverty Level	
	All Ages	Children ^b	All Ages	Children	All Ages	Children	All Ages	Children	All Ages	Children	All Ages	Children
U.S.^c	11.5	13.1	13.2	19.7	10.2	12.6	11.5	11.2	Comparable data not available		14.4	15.7
CA^d	13.6 ^f	15.4 ^f	18.2	25.9 ^e	10.7	13 ^e	14.1	20 ^e	9.9	17 ^e	11.9	NA

¹⁸Of the three population centers within the project area, data for two of the areas, Kettleman City and Avenal, are available as the result of a study conducted by the California Environmental Protection Agency and the California Department of Public Health (DPH). Although the asthma ED visit rate appears lower for Avenal and Kettleman City as compared with the SJV and California rates, because the population in these two areas is relatively small (15,000 and 1620 respectively) there is a high degree of variability in these rates. It is important to note that the study reached the conclusion that for most of the health metrics examined, Kettleman City was not appreciably different than any other community in the Valley. The Department of Public Health did note, however, an excess in the number of children with birth defects born to mothers who had lived in Kettleman City. Investigation of Birth Defects and Community Exposures in Kettleman City, California, California EPA and California Department of Public Health, page 60, December 2010. Available at

<http://www.calepa.ca.gov/envjustice/Documents/2010/KCDocs/ReportFinal/FinalReport.pdf>

¹⁹ <http://www.californiabreathing.org/asthma-data/county-comparisons/lifetime-asthma-prevalence-children-2007>

²⁰ <http://www.countyofkings.com/health/forms/Community%20Health%20Status%20Report%202008-2009.pdf> (page 34)

In Percents	Total		Black	Hispanic ^a	White	Asian/ Pacific Islander	Family Income Below Poverty Level
Fresno County^f	18.3 ^g	19.2 ^g	Prevalence data are not available at the county level by racial / ethnic population.				
Kings County^f	17.9	24.0 ^g					

- a. Includes Puerto Ricans (National asthma prevalence of 20.3% for all ages, 17.8% for children)
- b. Children <18 years old
- c. 2007 CDC data, available at: <http://www.cdc.gov/asthma/nhis/07/table2-1.htm>
- d. California Breathing (California Department of Public Health) Report: The Burden of Asthma: A Surveillance Report (2007), based on 2003 data, except where noted
- e. Data available only for adolescents. Prevalence among all CA adolescents is 18%.
- f. County Comparisons based on 2007 data from California Department of Public Health, California Breathing program. Available at: <http://www.californiabreathing.org/>
- g. The prevalence is statistically significantly higher than the rate for the State of California for the same ethnic/age group.

Access to Health Care in Kings and Fresno Counties

Medically Underserved Areas or Populations have been designated in portions of all eight San Joaquin Valley counties, including Kings and Fresno Counties²¹. According to California Health Interview Survey (CHIS) data, 16.4% of the Kings County population and 14.2% of the Fresno County population was not insured as of the date of the last survey (2007) compared to 13.2% of the entire California population surveyed.²²

Health Impacts Associated with Air Pollution in the Area

The San Joaquin Valley, which includes Kings County, is an extreme ozone non-attainment area with some of the highest levels of PM2.5 in the country. The poor air quality creates an adverse health impact for all its residents. Children, people older than 65, and minorities living in Kings and nearby Fresno County suffer from higher rates of asthma-related hospitalizations and emergency department visits than similar groups living elsewhere in the State. The residents living within 25 km of the proposed project are disproportionately low income and minority compared with the rest of the State. While we have only county-level statistics, we anticipate that these statistics would also represent local conditions.

²¹ <http://hpsafind.hrsa.gov/>

²² <http://www.askchis.com/>

Impact of Project's Emissions on the NAAQS Applicable to the PSD Permit Application

The first part of EPA's environmental justice analysis concerns the potential effects on minority or low income populations from emissions that may affect the NAAQS EPA proposes to apply to this permit application. Those are emissions affecting the NAAQS for NO₂ (annual average), CO (1-hr and 8-hr average), and PM₁₀ (24-hr average and annual). As noted earlier, since the potential emissions of the Project are below significance levels for SO₂, the project is not expected to have a significant impact on the applicable SO₂ NAAQS.

EPA has determined from the modeled results for the facility that the Project impacts are well below (in all cases, less than 6% of) the applicable NAAQS for the PSD pollutants regulated under the PSD permit, including the annual NO₂ standard. The modeled impact of NO₂ for the annual averaging period is 0.5 µg/m³, less than 1% of the NAAQS of 100 µg/m³. The modeled PM₁₀ impact (24-hour averaging period) is 2.9 µg/m³, approximately 2% of the PM₁₀ 24-hour NAAQS of 150 µg/m³. The modeled CO impact for the 8-hour averaging period is 337 µg/m³, less than 4% of the NAAQS of 10,000 µg/m³, and the modeled CO impact for the 1-hour averaging period is 2,175 µg/m³, less than 6% of the NAAQS of 40,000 µg/m³. As stated elsewhere, the NAAQS are health based standards and are designed to protect public health with an adequate margin of safety, including sensitive populations. Taking into account these modeled results in light of the health-based nature of the applicable NAAQS, EPA has determined that proposed emissions limits for these pollutants will not result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

Review of Modeled Short-Term NO₂ Impacts from Avenal Energy Project's Emissions

The second part of EPA's environmental justice analysis for this permit concerns the short-term impacts of NO₂. For the reasons stated in the Revised Statement of Basis, EPA is proposing to grandfather the Project from demonstrating that this source will not cause or contribute to a violation of the recently promulgated 1-hour NO₂ NAAQS. EPA nevertheless is performing an analysis of impacts from short-term NO₂ concentrations because the Agency recently determined that the annual NO₂ standard alone is not sufficient to protect public health with an adequate margin of safety against adverse respiratory effects associated with short-term exposures to NO₂. Final Rule, 75 Fed. Reg. 6474 (Feb. 9, 2010). We note that because emissions of SO₂ from the project are below significance levels and thus have no more than a de minimis impact, we do not anticipate any significant or disproportionate impacts associated with these emissions. Therefore, further analysis of short-term impacts on SO₂ is not necessary.

The Agency currently has limited data as to the impacts of NO₂ emissions from the project or existing sources on the communities of interest. As previously discussed, there is limited hourly NO₂ monitoring data in California from EPA-approved monitoring network sites, and the closest monitoring sites are 28 miles and 46 miles from the proposed Project. The limited data indicate that background levels at the monitors closest to the facility are on par with measured levels of NO₂ statewide, and that background levels of 1-hour NO₂ in the general area

surrounding the facility are not disproportionately high as compared with communities elsewhere in the State.

In addition, the District conducted an assessment of the 1-hour NO₂ emissions from the Project on June 14, 2010.²³ The results of this analysis indicate that the operational emissions from the facility result in a maximum 1-hour NO₂ impact of 82.43 µg/m³ (44 ppb), which represents 44% of the standard (188 µg/m³ or 100 ppb). This value represents the highest modeled impact at any location resulting from the facility's emissions alone; all other locations would have a lower impact from the facility. The modeled impact is based on the average of the five yearly maximum 8th high values, consistent with EPA's *Notice Regarding Modeling for New Hourly NO₂ NAAQS, Updated - 02/25/2010*, which discusses procedures for calculating NO₂ modeled values suitable for comparison to the 1-hour NO₂ NAAQS.²⁴

This is the best information available to EPA at this time regarding the potential impacts of the facility's NO₂ emissions on short-term NO₂ levels. We do not have an acceptable analysis prepared for PSD purposes that provides a detailed comparison of the facility's emissions, as well as background and nearby sources, with the 1-hour NO₂ NAAQS.

In light of the limited data available, EPA cannot reach any definitive conclusion about the specific human health or environmental impacts of short-term exposure to NO₂ emissions from the facility on minority and low-income populations.

Emissions of Pollutants for Which Area Exceeds Air Quality Standards

The California Energy Commission analyzed environmental justice considerations before approval of Avenal's Application for Certification. Final Commission Decision, Application for Certification (08-AFC-1), pp. 328-332 (December 2009). The Commission concluded based on the evidentiary record that the fully mitigated project would not result in any significant adverse environmental or public health impacts to any population, including farm workers in the region. Id. at 331. EPA presents here a summary of the State's environmental justice analysis, as set forth in the Final Commission Decision, in order to provide further information about the

²³ See Memorandum of June 14, 2010 to Derek Fukuda, AQE-Permit Services, from Leland Villalvazo. SAQS-Technical Services, Subject: Revised NO₂ 1-hour NAAQA Assessment for Avenal Power Center. This memorandum was prepared in support of the Revised Preliminary Determination of Compliance Evaluation for the Avenal Power Center Project, which proposed to limit the annual facility wide NO_x and CO emissions for the source, resulting in a minor source permit for PSD purposes. However, as noted in EPA Comments on Project Number C-II00751 for Avenal Power Center LLC (08-AFC-OI), September 13, 2010, the equipment emitting NO_x from both the major and minor source project configurations would have the same permitted 1-hour emission rates, and therefore, the modeled short-term 1-hour NO₂ impacts of the major source Project's emissions would be identical to that of the minor source project under consideration in the SJVAPCD's minor source permitting process.

²⁴ EPA's *Notice Regarding Modeling for New Hourly NO₂ NAAQS, Updated - 02/25/2010*, states, in its discussion regarding procedures for calculating the NO₂ design value for comparison to the 1-hour NAAQS: "The highest of the average 8th-highest (98th-percentile) concentrations across all receptors, based on the length of the meteorological data period, represents the modeled 1-hour NO₂ design value based on the form of the standard." The District's analysis was based on five years of meteorological data (2004-2008). Therefore, the modeled 1-hour NO₂ design value based on the form of the standard in this case would be the average 8th- highest (98th-percentile) based on the average of 5 years data.

potential air quality impacts of the Project.²⁵ With respect to air quality impacts, the Commission found that the combination of emissions controls and offsetting emission reductions would mitigate all project air quality impacts to a less than a significant level. *Id.* at 127. The CEC considered modeling that predicted maximum impacts of the facility on PM_{2.5} concentrations of 2.9 µg/m³, which is approximately 8 percent of the 35 µg/m³ National Air Quality Standard for PM_{2.5} concentrations averaged over a 24 hour period. This same modeling predicted maximum impacts on annual PM_{2.5} concentrations of 0.8 µg/m³ which are approximately 6.5 percent of California's 12 µg/m³ air quality standard.²⁶ Pre-existing background concentrations of PM_{2.5} in the non-attainment area are as high as 75 µg/m³ over a 24-hour period and up to 18.4 µg/m³ on an annual basis. *Id.* at 123.²⁷

EPA is working with the California Air Resources Board (ARB) and the District to ensure that there is a comprehensive plan with adequate controls for attaining the annual and 65 µg/m³ 24-hour PM_{2.5} ambient air quality standards by the Clean Air Act's deadline of 2015. See EPA's proposed action on the 2008 San Joaquin Valley PM_{2.5} plan at 75 FR 74518 (November 30, 2010). We will also be working closely with both agencies to develop a plan to meet the 35 µg/m³ 24-hour standard, which is due to EPA in late 2012.

Since NO_x is a precursor to ozone formation, the District required the Project to supply NO_x offsets at a 1.5 to 1 ratio to mitigate NO_x emissions from the facility. Because ozone formation is not localized, ozone and ozone precursors are considered area or basin-wide pollutants. While the NO_x offsets provided by the applicant for this source were generated within the ozone non-attainment area, they were not required to be near the source. (The closest offsets to the facility were generated between 12 and 20 miles away.) The impacts of NO₂, on the other hand, can be localized in nature. NO_x offsets within the broader non-attainment area will have a mitigating effect on ozone formation within the non-attainment area, but they will not serve to mitigate any localized impacts of NO₂ and therefore do not add meaningfully to EPA's analysis of potential NO₂ impacts on the local communities. We should note that there may be some co-benefits for local areas from the NO_x emissions reductions used for the project. However, we do not have data showing what these potential co-benefits might be.

²⁵ As previously mentioned, EPA has not yet commenced its investigation into the Title VI complaint's allegation that operation of the proposed Avenal power plant will result in adverse health impacts on the residents of color of Avenal and Kettleman City.

²⁶ The federal primary National Ambient Air Quality Standard for PM_{2.5} for the annual averaging period is 15.0 µg/m³.

²⁷ The PM-2.5 values in the CEC report reflect data from the Bakersfield monitor, located approximately 80 miles southeast of the Avenal Energy Project. The Corcoran monitor, located within 28 miles east of the Project, reports 49 µg/m³ 24-hour and 17.3 µg/m³ annual design value concentrations. See EPA's Air Quality System, <http://www.epa.gov/ttn/airs/airsaqs/>.

Conclusion

As explained above, with respect to all pollutants, including those not attaining the NAAQS in the affected area, the California Energy Commission found that the combination of emissions controls and offsetting emission reductions would mitigate all project air quality impacts to a less than a significant level. EPA's own analysis indicates that this project will not cause or contribute to air quality levels in excess of health standards for SO₂, CO, PM₁₀ and the annual NO₂ standard and that there will not be disproportionately high and adverse human health or environmental effects with respect to these air pollutants on minority or low-income populations residing near the proposed project or the community as a whole. While EPA has no information indicating that short-term NO₂ emissions from the project will negatively impact minority and low-income populations in the vicinity, it is difficult to speak definitively to this point due to the limitations of the available data.

Accordingly, EPA requests any additional information that might further inform the Agency's environmental justice analysis. EPA also requests public comment on this issue generally, but particularly in relation to the topics addressed below.

In light of the existing conditions in the local communities where this source proposes to construct, EPA intends to place an ambient NO₂ monitor in an appropriate location in the vicinity of the proposed source to gather more information about the local NO₂ concentrations. In EPA's recent NO₂ monitoring rule that was part of the action to complete the 1-hour NO₂ NAAQS, EPA specifically set aside up to 40 monitors to be sited in areas with minority and low income populations at the discretion of EPA Regional Administrators. Thus, the Agency has the discretion to place an air quality monitor in an appropriate location to develop air quality information for the Region and also to help assess air quality before and after operation of the Avenal plant. This monitor, along with other NO₂ monitors that exist or may be sited in the San Joaquin Valley Air District, will be used by the ARB, the District and EPA to determine whether air quality in the region meets or exceeds the NAAQS for NO₂, and will inform governmental plans to address any identified concerns. Any such plans would consider all contributing sources in the airshed, including the Avenal facility, in the effort to address any identified non-attainment challenges. EPA welcomes public comment on its intentions in this regard.

In the event that EPA were to gather air quality monitoring data that identify a concern in the local community from short-term NO₂ emissions, EPA is considering options that EPA, ARB or the District might employ to mitigate such concerns. For example, EPA may have the option to direct federal funds to the local area to address sources of NO₂ and provide for effective emissions reductions. In addition, the data from monitoring might be used to better inform measures that the ARB or the District could take (or might be required to take) to ensure attainment and maintenance of the 1-hour NO₂ NAAQS. Indeed, if monitoring were to identify violations of the 1-hour NO₂ NAAQS, the State would need to address those issues through the

mandated attainment planning process to identify and implement measures to reduce NO₂ sufficiently to assure air quality that meets the applicable standard. EPA requests public comment on the merits of such approaches.

EPA also requests comments on whether there are any conditions that should be included in the permit in response to these concerns. For example, because this area includes complex terrain and characterization of NO₂ issues in that area can be challenging, EPA requests comment on considering establishing a condition in the permit that would require the applicant to monitor air quality conditions after construction of the facility. This monitoring, in coordination with the community-based NO₂ monitor, could help provide better characterization of the NO₂ concentrations in the area. Under section 52.21(m)(2) of EPA's regulations, EPA can require the permit applicant to conduct ambient monitoring "after construction of the stationary source ... as the Administrator determines is necessary to determine the effect emissions from the stationary source ... may have, or are having, on air quality in any area."

Regina McCarthy
Assistant Administrator for Air and Radiation

APPENDIX 1 – Demographic Maps for Avenal Energy Project EJ Analysis Project Impact Area

Figure 1 - Project Site and Population Density

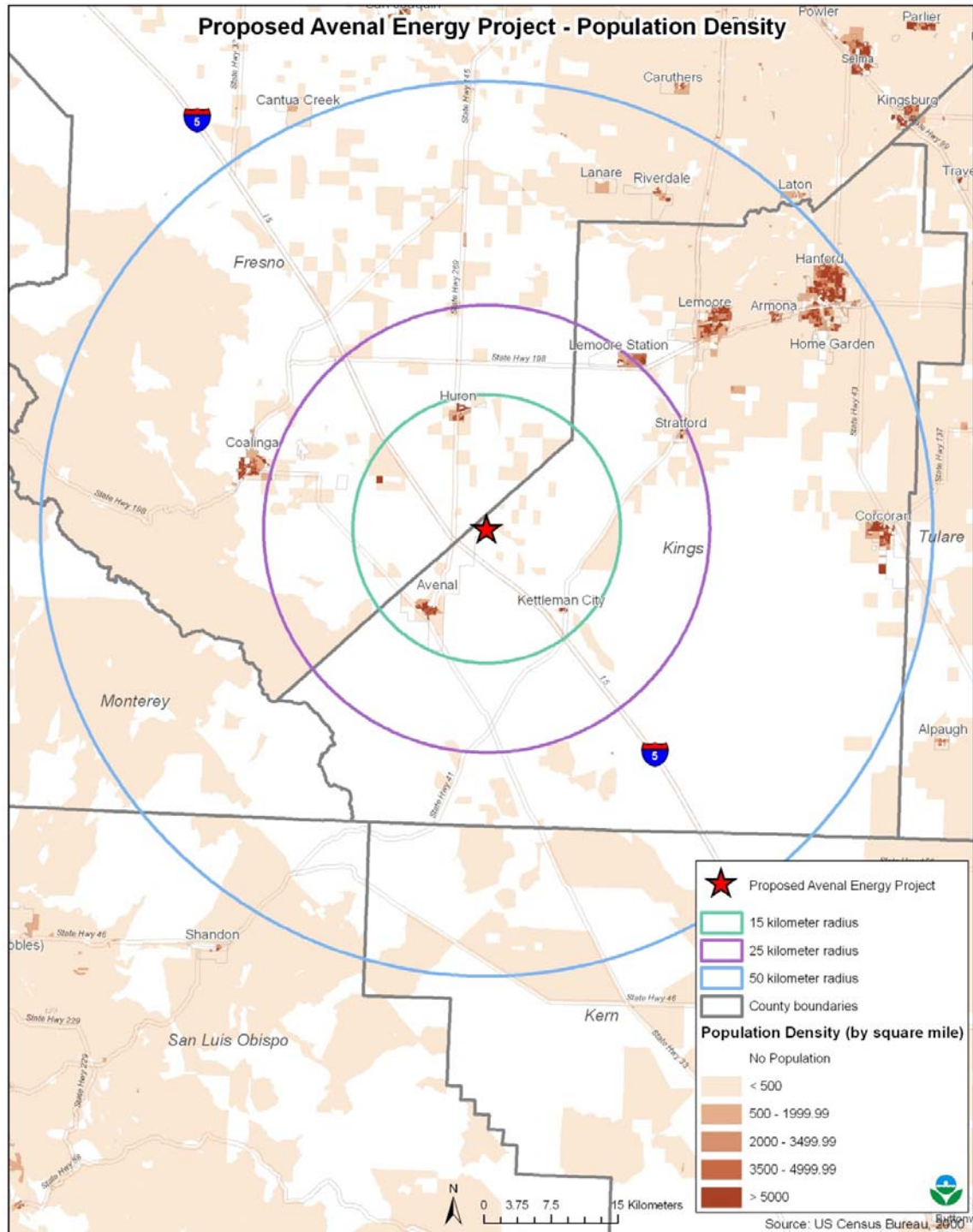
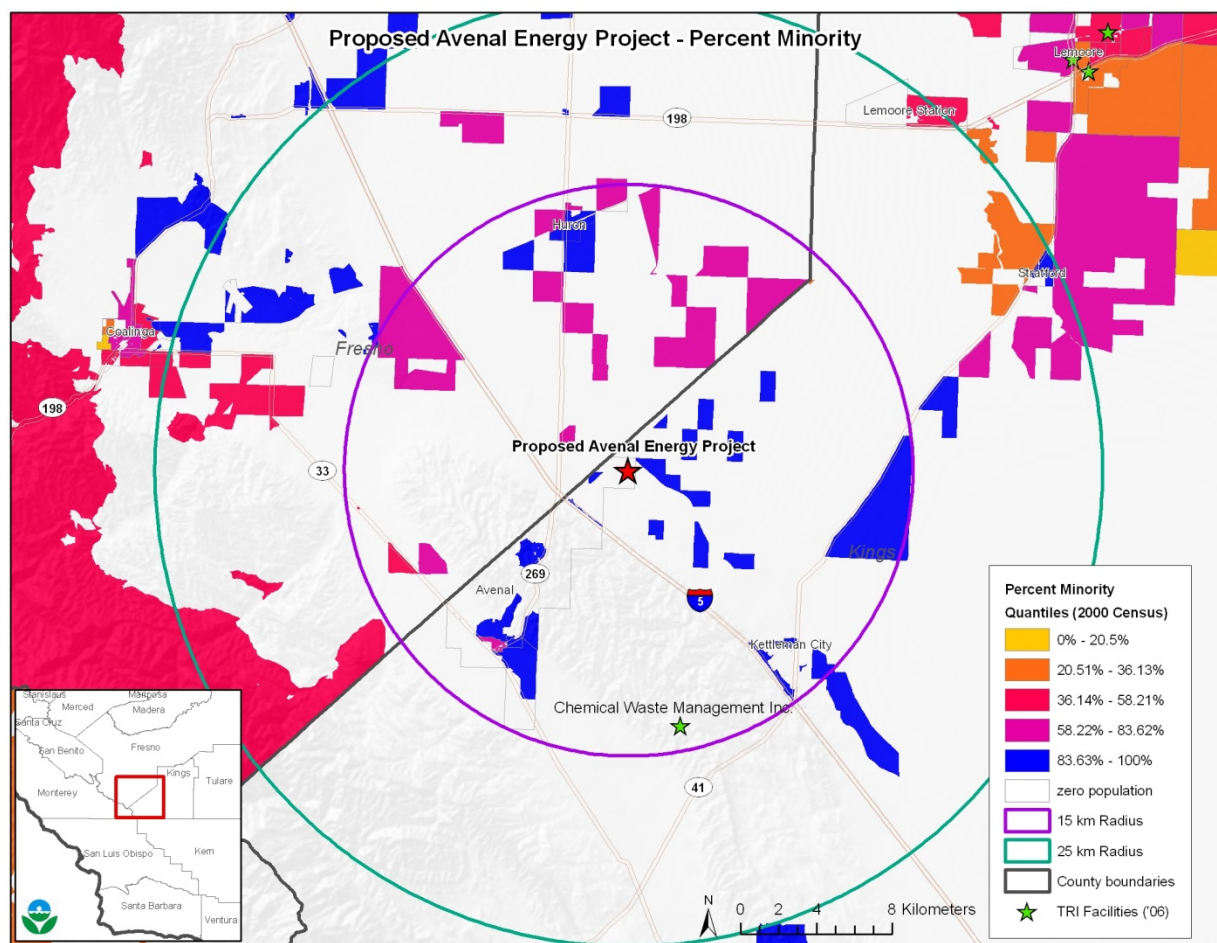


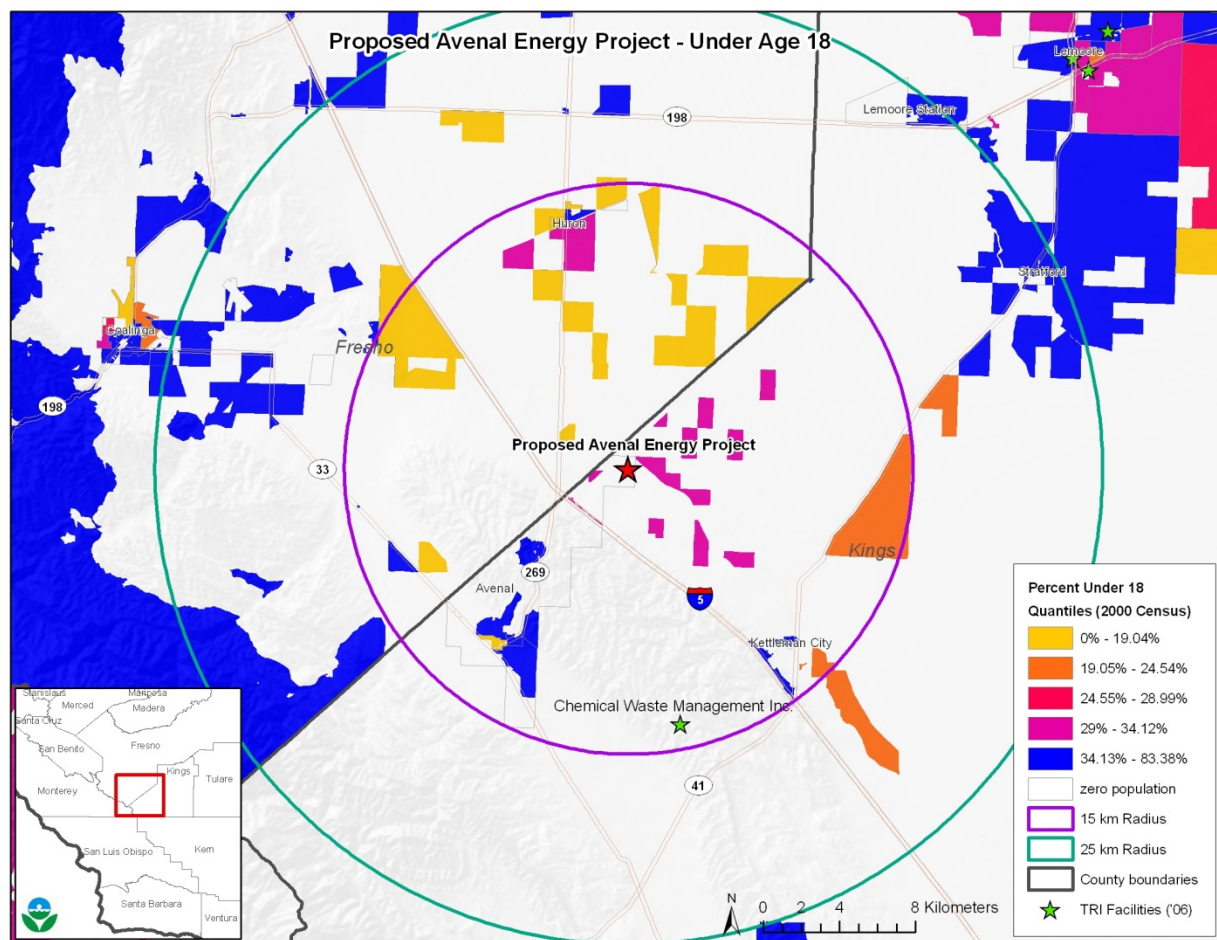
Figure 2 – Percent Minority



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

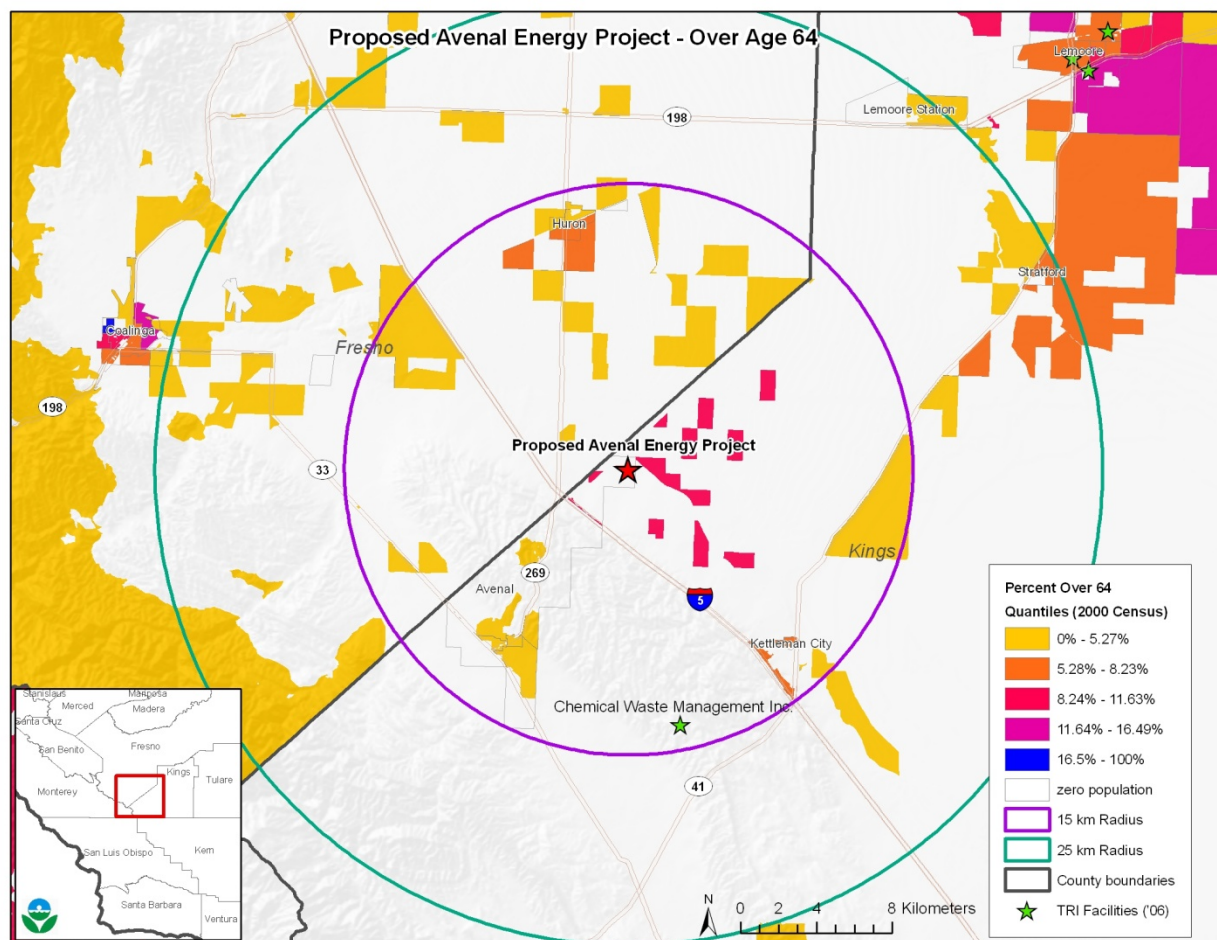
Figure 3 - Percent Under Age 18



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

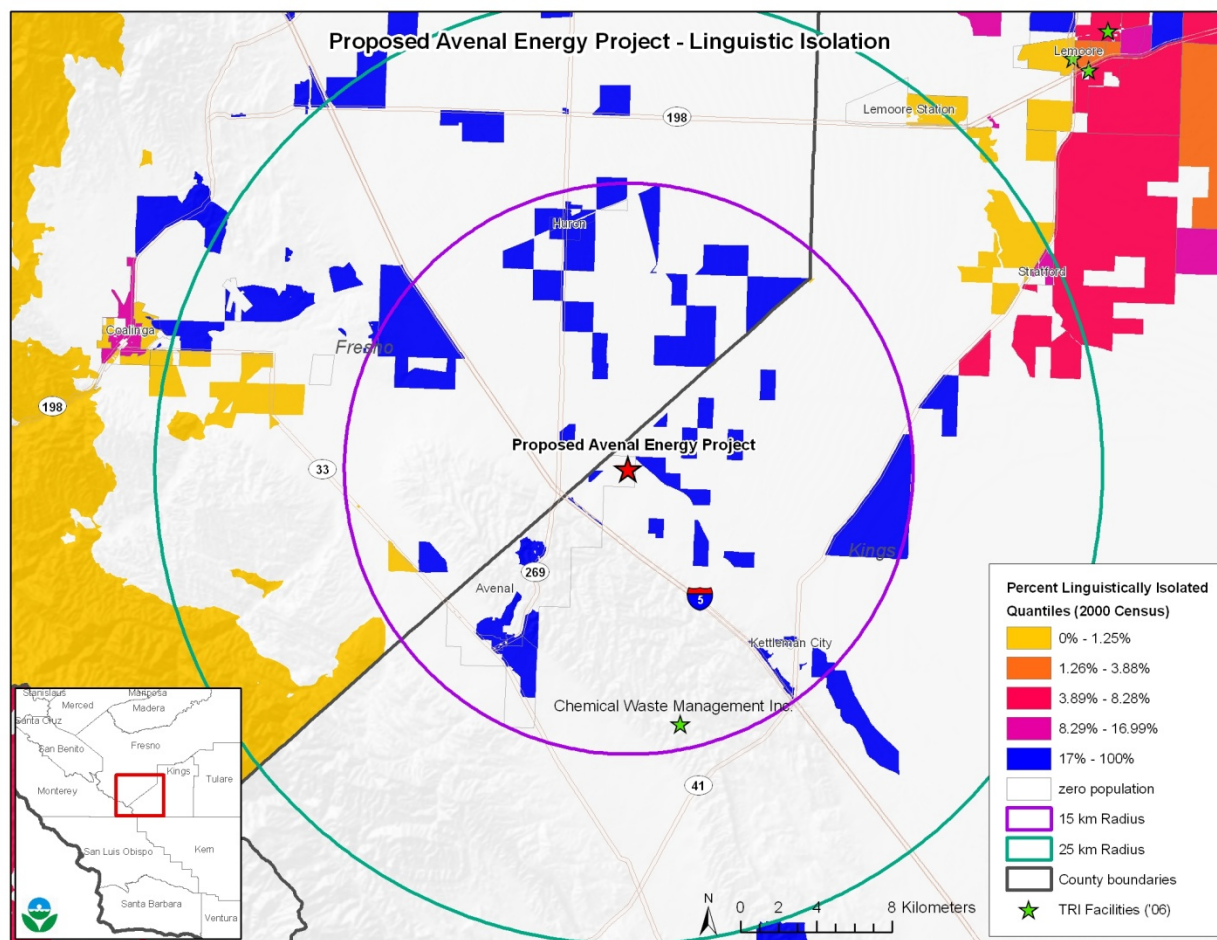
Figure 4 - Percent Over Age 64



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

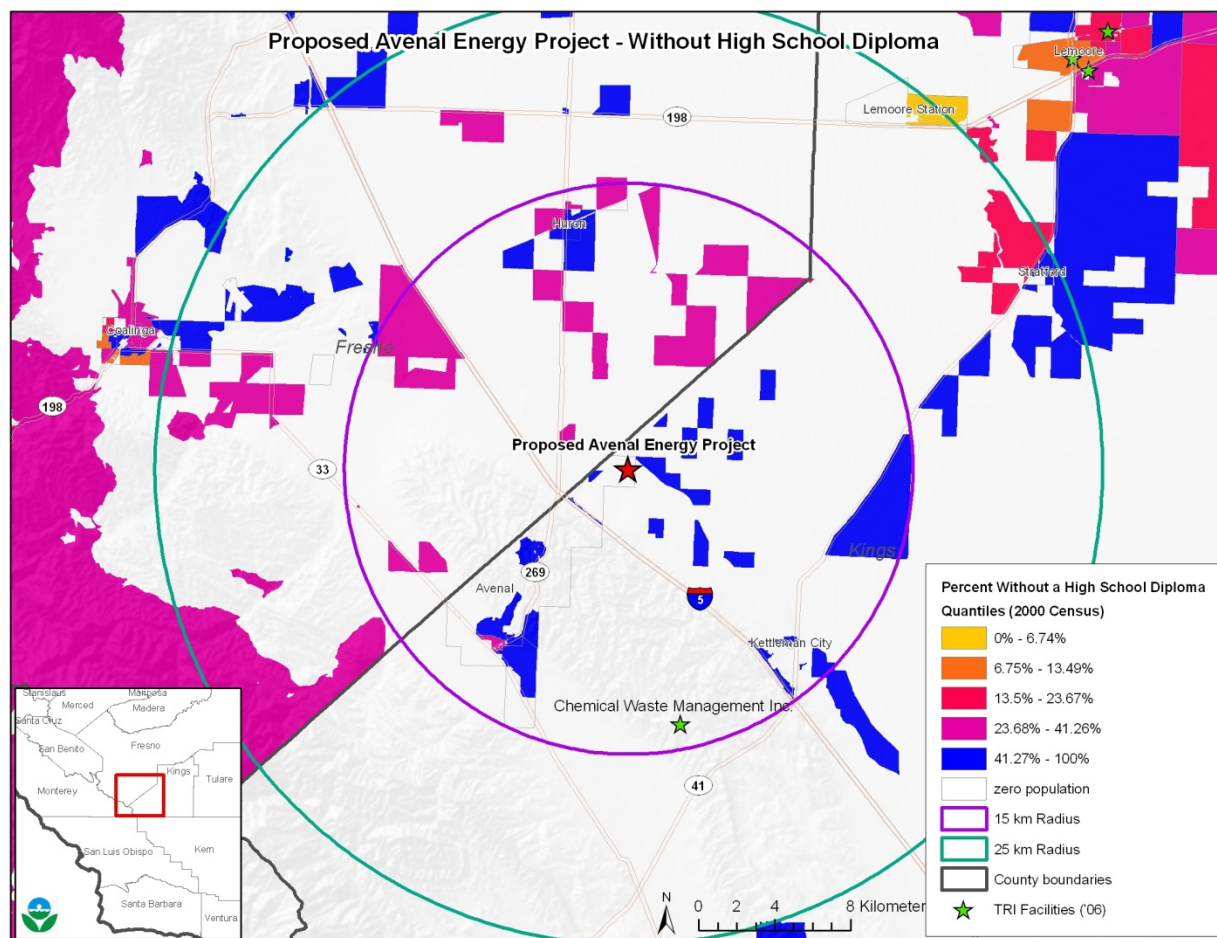
Figure 5 - Percent Linguistically Isolated



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

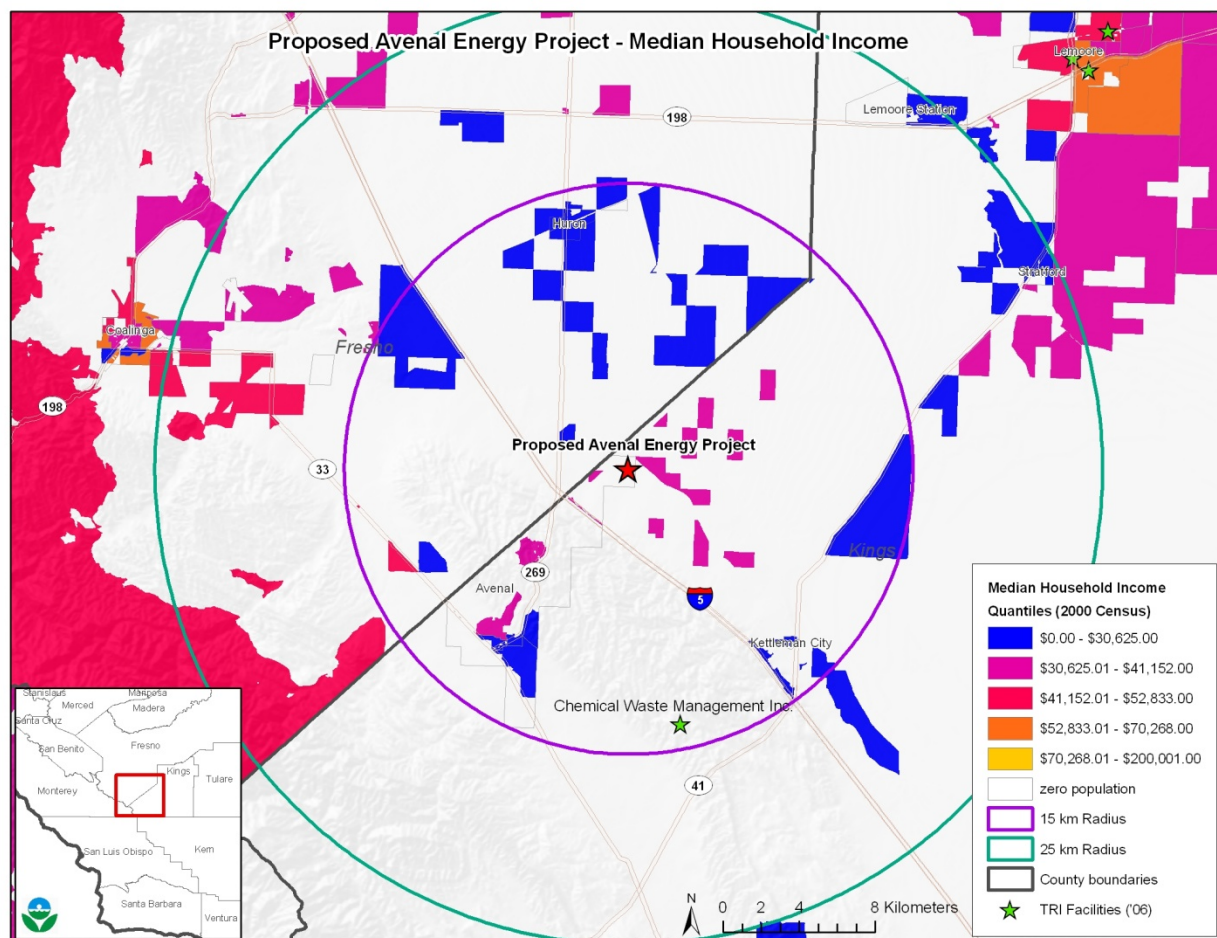
Figure 6 - Percent Age Over 25 without High School Diploma



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

Figure 7 - Median Household Income



Radius, km	Population	Percent Minority	Percent Under Age 18	Percent Over Age 64	Percent Linguistically Isolated	Percent w/o High School Diploma	Average Median Household Income, \$
15	25,660	85	24	3	34	51	27,221
25	32,244	82	25	3	30	50	27,771
50	162,723	62	29	7	11	35	36,843
Kings County	129,461	59	29	7	9	31	35,749
Fresno County	799,407	60	32	10	10	32	34,725
San Joaquin Valley	3,182,529	55	33	10	9	33	38,162
State of CA	33,871,648	53	27	11	10	23	47,493

Source: US Census 2000, Summary Tape File 3

Appendix 2

Monitored Hourly NO₂ Values in California (2006-2009)*

Monitor ID	Street Address	City Name	County Name	One Hour NO ₂ Design Value (ppb)
06-001-0007-42602-1	793 RINCON AVE.	Livermore	Alameda	47.3
06-001-0009-42602-1	9925 International Blvd.	Oakland	Alameda	51.6
06-001-0011-42602-1	1100 21st Street	Oakland	Alameda	47.0
06-001-1001-42602-1	40733 CHAPEL WAY.	Fremont	Alameda	47.0
06-001-2004-42602-1	1340 Sixth Street	Berkeley	Alameda	45.0
06-007-0002-42602-1	468 MANZANITA AVE.	Chico	Butte	38.0
06-013-0002-42602-1	2956-A TREAT BOULEVARD	Concord	Contra Costa	36.6
06-013-1002-42602-1	5551 BETHEL ISLAND RD.	Bethel Island	Contra Costa	31.0
06-013-1004-42602-1	1865 D RUMRILL BLVD	San Pablo	Contra Costa	41.6
06-013-3001-42602-1	583 W. 10TH ST.	Pittsburg	Contra Costa	44.0
06-019-0007-42602-1	4706 E. DRUMMOND ST.	Fresno	Fresno	61.0
06-019-0008-42602-1	3425 N FIRST ST.	Fresno	Fresno	56.6
06-019-0242-42602-1	SIERRA SKYPARK#2-BLYTHE & CHNNLT	Fresno	Fresno	39.6
06-019-4001-42602-1	9240 S. RIVERBEND.	Parlier	Fresno	39.3
06-019-5001-42602-1	908 N VILLA AVE.	Clovis	Fresno	55.6
06-023-1004-42602-1	717 SOUTH AVENUE	Eureka	Humboldt	22.3
06-025-0005-42602-1	1029 ETHEL ST, CALEXICO HIGH SCHOOL	Calexico	Imperial	72.3
06-025-0006-42602-1	CALEXICO - EAST	Calexico	Imperial	70.6
06-025-1003-42602-1	150 9TH ST.	El Centro	Imperial	50.3
06-029-0007-42602-1	JOHNSON FARM.	Edison	Kern	40.0
06-029-0010-42602-1	1128 GOLDEN STATE HIGHWAY	Bakersfield	Kern	60.0
06-029-0014-42602-1	5558 CALIFORNIA AVE.	Bakersfield	Kern	61.0
06-029-5001-42602-1	20401 BEAR MTN BLVD, ARVIN, CA.	Arvin	Kern	31.6
06-029-6001-42602-1	548 WALKER ST.	Shafter	Kern	53.3
06-031-1004-42602-1	807 SOUTH IRWIN ST.	Hanford	Kings	50.0
06-037-0002-42602-2	803 N. LOREN AVE.	Azusa	Los Angeles	78.3
06-037-0016-42602-1	840 LAUREL	Glendora	Los Angeles	69.6
06-037-0113-42602-1	VA HOSPITAL	West Los Angeles	Los Angeles	63.3
06-037-1002-42602-2	228 W. PALM AVE.	Burbank	Los Angeles	75.3
06-037-1103-42602-1	1630 N MAIN ST.	Los Angeles	Los Angeles	81.3
06-037-1201-42602-2	18330 GAULT ST., RESEDA	Reseda	Los Angeles	59.6

Monitor ID	Street Address	City Name	County Name	One Hour NO ₂ Design Value (ppb)
06-037-1301-42602-2	11220 LONG BEACH BLVD.	Lynwood	Los Angeles	76.5
06-037-1302-42602-1	700 North Bullis Road	Compton	Los Angeles	85.5
06-037-1602-42602-1	4144 SAN GABRIEL RIVER PKWY.	Pico Rivera	Los Angeles	83.0
06-037-1701-42602-2	924 N. GAREY AVE.	Pomona	Los Angeles	81.0
06-037-2005-42602-1	752 S. WILSON AVE.	Pasadena	Los Angeles	69.6
06-037-4002-42602-2	3648 N. LONG BEACH BLVD.	Long Beach	Los Angeles	78.3
06-037-5005-42602-1	7201 W. WESTCHESTER PARKWAY	Los Angeles	Los Angeles	71.3
06-037-6012-42602-1	22224 PLACERITA CANYON RD.	Santa Clarita	Los Angeles	57.3
06-037-9033-42602-1	43301 DIVISION ST.	Lancaster	Los Angeles	53.3
06-039-0004-42602-1	RD. 29 1/2 NO. OF AVE 8	Madera	Madera	40.3
06-041-0001-42602-1	534 4TH ST.	San Rafael	Marin	44.6
06-043-0003-42602-1	TURTLEBACK DOME	Yosemite National Park	Mariposa	5.1
06-045-0008-42602-1	306 E. GOBBI STREET	Ukiah	Mendocino	32.3
06-045-0009-42602-1	899 SO MAIN STREET	Willits	Mendocino	26.5
06-047-0003-42602-1	385 S. COFFEE AVENUE	Merced	Merced	43.3
06-053-1003-42602-1	867 E. LAUREL Dr	Salinas	Monterey	34.3
06-055-0003-42602-1	2552 JEFFERSON AVE.	Napa	Napa	39.3
06-057-0005-42602-1	200 LITTON DR.	Grass Valley	Nevada	26.0
06-059-0007-42602-5	1630 W. PAMPAS LANE	Anaheim	Orange	65.3
06-059-1003-42602-1	2850 MESA VERDE DR. EAST	Costa Mesa	Orange	60.3
06-059-5001-42602-2	621 W. LAMBERT	La Habra	Orange	69.0
06-061-0006-42602-1	151 NO SUNRISE BLVD.	Roseville	Placer	53.0
06-065-0004-42602-1	10551 Bellegrave	Mira Loma	Riverside	73.0
06-065-0012-42602-1	200 S. HATHAWAY ST.	Banning	Riverside	58.3
06-065-1003-42602-3	7002 MAGNOLIA AVE.	Riverside	Riverside	63.5
06-065-5001-42602-2	FS-590 RACQUET CLUB AVE.	Palm Springs	Riverside	45.0
06-065-8001-42602-2	5888 MISSION BLVD.	Rubidoux	Riverside	63.0
06-065-8005-42602-1	5130 POINSETTIA PLACE	Mira Loma	Riverside	59.0
06-065-9001-42602-1	506 W FLINT ST.	Lake Elsinore	Riverside	48.0
06-067-0002-42602-1	7823 BLACKFOOT WAY.	North Highlands	Sacramento	77.0
06-067-0006-42602-1	DEL PASO-2701 AVALON DR.	Sacramento	Sacramento	45.6

Monitor ID	Street Address	City Name	County Name	One Hour NO ₂ Design Value (ppb)
06-067-0010-42602-1	1309 T ST.	Sacramento	Sacramento	55.6
06-067-0011-42602-1	12490 BRUCEVILLE RD.	Elk Grove	Sacramento	35.6
06-067-0012-42602-1	50 NATOMA STREET	Folsom	Sacramento	32.6
06-067-0013-42602-1	3801 AIRPORT ROAD	Sacramento	Sacramento	52.0
06-067-0014-42602-1	68 GOLDENLAND COURT	Sacramento	Sacramento	47.5
06-071-0001-42602-1	200 E. BUENA VISTA	Barstow	San Bernardino	63.0
06-071-0306-42602-1	14306 PARK AVE.	Victorville	San Bernardino	62.0
06-071-1004-42602-2	1350 SAN BERNARDINO RD.	Upland	San Bernardino	70.0
06-071-1234-42602-1	CORNER OF ATHOL AND TELESCOPE	Trona	San Bernardino	42.6
06-071-2002-42602-1	14360 ARROW BLVD.	Fontana	San Bernardino	74.0
06-071-9004-42602-1	24302 4TH ST.	San Bernardino	San Bernardino	63.6
06-073-0001-42602-1	80 E. 'J' ST.	Chula Vista	San Diego	58.6
06-073-0003-42602-1	1155 REDWOOD AVE.	El Cajon	San Diego	53.3
06-073-0006-42602-1	5555 OVERLAND AVE.	San Diego	San Diego	56.3
06-073-1002-42602-1	600 E. VALLEY PKWY.	Escondido	San Diego	62.6
06-073-1006-42602-1	2300 VICTORIA DR.	Alpine	San Diego	38.0
06-073-1008-42602-1	21441-W B STREET	Camp Pendleton (Marine Corps Base)	San Diego	58.6
06-073-1010-42602-1	1110 BEARDSLEY STREET	San Diego	San Diego	69.6
06-073-2007-42602-1	1100 PASEO INTERNATIONAL	Otay Mesa	San Diego	84.6
06-075-0005-42602-1	10 ARKANSAS ST.	San Francisco	San Francisco	54.3
06-077-1002-42602-2	HAZELTON-HD.	Stockton	San Joaquin	57.6
06-077-3005-42602-1	5749 S. TRACY BLVD.	Tracy	San Joaquin	38.6
06-079-3001-42602-1	MORRO BAY BLVD & KERN AVE.	Morro Bay	San Luis Obispo	34.6
06-079-4002-42602-1	NIPOMO REGIONAL PARK.	Nipomo	San Luis Obispo	29.3
06-079-8001-42602-1	6005 LEWIS AVENUE	Atascadero	San Luis Obispo	42.0
06-081-1001-42602-1	897 BARRON AVE.	Redwood City	San Mateo	45.6
06-083-0008-42602-1	EL CAPITAN ST PRK, HWY 10	Capitan	Santa Barbara	29.6
06-083-0011-42602-1	700 E. CANON PERDIDO	Santa Barbara	Santa Barbara	46.0
06-083-1008-42602-1	906 S BROADWAY	Santa Maria	Santa Barbara	42.3
06-083-1013-42602-1	HS & P FACILITY-500 M SW.	Lompoc	Santa Barbara	7.0
06-083-1014-42602-1	PARADISE RD.	Los Padres National Forest	Santa Barbara	6.3
06-083-1018-42602-1	GTC B-HWY 101 NEAR NOJOQUI PASS, GAVIOTA	Gaviota	Santa Barbara	23.3

Monitor ID	Street Address	City Name	County Name	One Hour NO ₂ Design Value (ppb)
06-083-1021-42602-1	GOBERNADOR RD.	Carpinteria	Santa Barbara	18.3
06-083-1025-42602-1	LFC #1-LAS FLORES CANYON	Capitan	Santa Barbara	14.0
06-083-2004-42602-1	128 S 'H' ST.	Lompoc	Santa Barbara	28.3
06-083-2011-42602-1	380 N FAIRVIEW AVENUE	Goleta	Santa Barbara	35.3
06-083-4003-42602-1	STS POWER PLANT	Vandenberg Air Force Base	Santa Barbara	8.6
06-085-0005-42602-1	158B JACKSON ST.	San Jose	Santa Clara	53.3
06-087-0003-42602-1	Center St	Davenport	Santa Cruz	22.0
06-095-0004-42602-1	304 TUOLUMNE ST.	Vallejo	Solano	42.3
06-095-0006-42602-1	E SECOND ST.	Benicia	Solano	34.5
06-097-0003-42602-1	837 5TH ST.	Santa Rosa	Sonoma	38.0
06-099-0006-42602-1	900 S MINARET STREET	Turlock	Stanislaus	48.6
06-101-0003-42602-1	773 ALMOND ST.	Yuba City	Sutter	49.3
06-107-2002-42602-1	310 N CHURCH ST.	Visalia	Tulare	61.3
06-111-2002-42602-1	5400 COCHRAN STREET	Simi Valley	Ventura	44.6
06-111-3001-42602-1	RIO MESA SCHOOL	El Rio	Ventura	37.6
06-113-0004-42602-1	UC DAVIS-CAMPUS	Davis	Yolo	36.0
TT-586-0009-42602-1	Pechanga Tribal Government Building	Not in a city	Riverside	25.8

*Design values are calculated according to the Primary NO₂ NAAQS Final Rule (40CFR Part 50 Appendix S, Section 3), based on data queried from EPA's Air Quality System (AQS, <http://www.epa.gov/ttn/airs/airsaqs/>).

Appendix 3

NOx Emissions Projections and Controls – Kings County, California

NOx Emissions Projections and Controls - Kings County, California						
annual average daily emissions in tons per day						
Source Category	Example sources	Year			Change 2010-2020	
		2010	2015	2020	Value	Percent
fuel combustion at stationary sources	boilers at utilities and factories, irrigation pumps,	2.2	1.5	2.3	0.1	3.7%
waste disposal	landfills, wastewater treatment plants	0.0	0.0	0.0	0.0	16.7%
residential fuel combustion	woodburning, water heaters, cooking	0.1	0.1	0.1	0.0	-4.0%
fires	structural and wild fires	0.0	0.0	0.0	0.0	14.3%
managed burning and disposal	agricultural waste burning, prescribed burning	0.3	0.3	0.3	0.0	-2.8%
passenger vehicles	cars, light duty trucks, motorcycles, motor homes	1.8	1.2	0.8	-1.0	-54.3%
medium and light heavy duty trucks		1.3	1.0	0.7	-0.7	-49.2%
heavy heavy duty diesel and gas trucks	local, intrastate, and interstate trucks	15.0	9.8	6.6	-8.4	-56.1%
buses	tour, transit, and school buses	0.4	0.4	0.4	0.0	-6.7%
aircraft	commercial and military	3.0	3.4	3.7	0.8	26.6%
trains		0.9	1.0	1.0	0.1	10.6%
recreational equipment	boats, off-road motorcycles	0.0	0.0	0.0	0.0	19.0%
off-road equipment	construction, oil/gas exploration, forklifts	0.6	0.5	0.4	-0.2	-34.4%
farm equipment	tractors, loaders	2.2	1.5	1.0	-1.2	-53.1%
Total annual average day NOx emissions, Kings County		27.837	20.711	17.320	-10.5	-37.8%

Source: ARB, CEPAM-2009 Almanac - 2/6/2011

**EARTHJUSTICE**ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

VIA ELECTRONIC MAIL

April 12, 2011

Ms. Shirley Rivera
U.S. EPA Region 9 (AIR-3)
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Supplemental Statement of Basis: PSD Permit Application for Avenal Energy Project
(March 2011)

Dear Ms. Rivera:

These comments are submitted on behalf of the Sierra Club, Center for Biological Diversity, and Center on Race, Poverty & the Environment. Commenters urge EPA to deny Avenal Energy Center's ("Avenal") Prevention of Significant Deterioration ("PSD") permit application and abandon the proposed illegal attempt to waive the plain statutory requirements of the Clean Air Act ("CAA"). EPA's Supplemental Statement of Basis seeks to rewrite the rules in order to permit the construction of this major new power plant in one of the most polluted, environmental justice communities in the country. EPA's proposed action would be in plain violation of the Clean Air Act, would undermine clear Congressional intent in adopting the PSD program, has no rational factual basis, ignores multiple other flaws with this application, and would be in violation of multiple procedural requirements.

EPA's tortured legal position is an attempt to resolve the on-going litigation brought by Avenal. Rather than resolve the matter, however, EPA's contortions have made a mess of this permitting process. At this point, there appears little possibility that these issues can be resolved in any meaningful way short of denying the permit outright and allowing Avenal to re-apply if it so desires.

I. EPA does not have authority to waive statutory requirements.

A. EPA's proposal to waive statutory requirements for Avenal would be a plain violation of the Clean Air Act.

EPA has no statutory authority to waive the requirements of section 165. Sources must demonstrate that they "will not cause, or contribute to, air pollution in excess of any . . . national ambient air quality standard," and that they are "subject to the best available control technology for each pollutant subject to regulation" CAA §§ 165(a)(3) and (4). EPA's proposed

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 2 of 24

decision for Avenal plainly waives these statutory requirements. If the permit issues as EPA proposes, Avenal will be able to construct its power plant without demonstrating that it will not cause or contribute to violations of the NO₂ and SO₂ national ambient air quality standards (“NAAQS”). Avenal will also be relieved of its obligation to demonstrate that it is subject to best available control technology for the regulated pollutant CO₂. EPA, however, can point to nothing in the statute that empowers the Agency to waive these statutory requirements.

The plain language of section 165 defines the applicability of these requirements based on when construction commences, not when the permit application is deemed complete. See CAA § 165(a) (prohibiting the construction of major emitting facilities that do not comply with the applicable permitting requirements where “construction is commenced after the date of the enactment of this part . . .”). Indeed, when Congress adopted the PSD program, it understood that certain sources might get caught by changing permit requirements and it offered specific “grandfathering” relief only to those sources on which “construction had commenced” before the enactment of the 1977 Clean Air Act Amendments. See CAA § 168(b). There is no authority for EPA to require compliance only with requirements that applied at the time the permit application was deemed complete or on the one-year anniversary of that completion determination. Where, as here, Congress has provided an express grandfathering exemptions and not others, EPA is not free to invent new authority to waive otherwise applicable statutory requirements. See *Andrus v. Glover Constr. Co.*, 446 U.S. 608, 616-17 (1980) (“Where Congress explicitly enumerates certain exceptions to a general prohibition, additional exceptions are not to be implied, in the absence of evidence of a contrary legislative intent.”); see also *NRDC v. EPA*, 489 F.3d 1250, 1259 (D.C. Cir. 2007).

EPA’s argument appears to be based on some contrived notion of conflicting statutory obligations – *i.e.*, the obligation to issue a permit within one year and the obligation to ensure that the permitting requirements of section 165 are fulfilled. See Supplemental Statement of Basis at 10 (“EPA must consider how to reconcile what have now become conflicting statutory obligations . . .”). This faulty line of reasoning was considered and rejected by the Supreme Court in *General Motors Corp. v. United States*, 496 U.S. 530 (1990). In that case, industry argued that EPA’s failure to act on a SIP revision within the statutory period for review precluded EPA from enforcing the existing provisions approved into the SIP. *Id.* at 535. As is the case here, the Court held that delay on the part of EPA does not affect the ability or obligation of EPA to enforce the other requirements of the Act. Unless Congress provided some express authority or direction for EPA to ignore otherwise applicable requirements when EPA misses its deadline for acting on the permit, EPA has no such authority or direction. The Court held that “because the statute does not reveal any congressional intent to bar enforcement of an existing SIP if EPA delays unreasonably in acting on a proposed SIP revision, . . . such an enforcement action is not barred.” *Id.* at 540. The Court further noted that “other statutory remedies are available when EPA delays action Although these statutory remedies may not appear to be so strong a deterrent to EPA delay as would an enforcement bar, these are the remedies that Congress has provided in the statute.” *Id.* at 541.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 3 of 24

Admittedly, EPA has missed the statutory deadline for acting on the Avenal permit. That, however, does not create a conflict with, or affect the obligation to ensure that the new source will not cause or contribute to air pollution problems and will be subject to best available controls. Avenal's remedy for delay is a deadline action under section 304(a)(2); it is not some entitlement to cutting off the obligation to comply with the statute.¹ If the Avenal permit application is inadequate to meet all applicable statutory requirements and EPA is compelled to act on the permit, the permit must be denied. Avenal will of course be free to submit a new application that includes all of the required demonstrations.

The statutory language is plain – a new source cannot cause or contribute to a violation of any NAAQS and must be subject to best available controls for all regulated pollutants. Unless the source can meet these criteria, it may not be built. The statute provides no authority for EPA to waive these requirements except in limited circumstances related to the transition allowed around the 1977 Clean Air Act Amendments. Nor does the failure to comply with the one-year statutory deadline for acting on a permit application bar the obligation to comply with these otherwise applicable statutory requirements. But even if one could ignore this plain language of the statute, EPA's proposed decision for Avenal would still be rejected as an unreasonable interpretation of the statute because it is counter to Congress's clear intent in adopting the PSD program.

B. EPA's proposed interpretation of the Act is unreasonable.

At the outset, EPA's decision is motivated by purposes that have no grounding in the Act (i.e., perceived procedural fairness, streamlined processing of permits, economic development over environmental protection). The purposes of the PSD program are expressly outlined in section 160 of the Act:

- (1) to protect health and welfare from any actual or potential adverse effect which may be reasonably anticipate[d] to occur from air pollution . . . notwithstanding attainment and maintenance of all national ambient air quality standards;
- (2) to preserve, protect, and enhance air quality in national parks . . . and other areas of special . . . value;
- (3) to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources; . . . and
- (5) to assure that any decision to permit increased air pollution . . . is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

¹ Moreover, EPA's proposed grandfathering scheme cannot remedy EPA's failure to meet the one-year deadline in any event; instead, it simply violates other statutory obligations.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 4 of 24

CAA § 160. EPA's decision to waive Avenal's obligation to demonstrate that it will not violate any NAAQS cannot be reconciled with any of the stated purposes of the PSD program. It does not protect health or welfare; it does not preserve air quality; it does not insure growth will be consistent with preservation of air resources; and it deliberately precludes careful decisionmaking and informed public participation. There is nothing in the Act that suggests that Congress intended that these purposes could be waived or trumped by some artificial notion of fairness or expedited permitting that would elevate procedure over substance.

What makes EPA's proposal for Avenal so particularly absurd is that EPA long ago rejected similar requests for grandfather exemptions based on these same clearly stated purposes of the PSD program. In the final rulemaking adopting the PSD regulations following the 1977 Clean Air Act Amendments, a commenter urged EPA "to promulgate a grandfather provision that would use the date of complete application instead of the date of permit issuance." 45 Fed. Reg. 52676, 52683 (Aug. 7, 1980). EPA rejected the idea, reasoning that "[u]se of such date, however, might exempt more projects from review. Hence, in EPA's view, it would fail to give adequate expression to the interests behind section 165, especially the goal of protecting air quality." *Id.*

EPA's proposed approach also undermines the fundamental policy choices that Congress made in adopting the PSD program: (1) that it is preferable to prevent air pollution from becoming a problem in the first place; and (2) that controls should be installed when new sources are being constructed rather than as retrofits on existing sources. *See* S. REP. NO. 95-127, at 11 (1977) ("This legislation defines 'significant deterioration' in all clean air areas as a specified amount of additional pollution. . . . This definition is intended to prevent any major decline in air quality currently existing in clean air areas and will provide a margin of safety for the future."); H.R. REP. NO. 94-1175, at 101 (1976) (noting "'an ounce of prevention is worth a pound of cure.' Permitting unrestricted deterioration of air quality up to ambient standards involves trying to cure a condition after it has developed rather than using practical and currently available means to prevent or minimize the condition in the first place."); *id.* at 108 ("Common sense dictates that it is substantially less expensive to prevent air pollution problems – and health problems – before they develop than it is to abate dangerous pollution levels This approach will allow us to avoid future massive air pollution concentrations which endanger public health and restrict further economic growth, require expensive retrofitting of pollution control technology and produce demands for economically and socially disruptive restrictions on the use of automobiles and on indirect sources.").

EPA's proposed approach for Avenal would defeat both of these policy goals. EPA will allow Avenal to be built even though there has been no demonstration that Avenal will not cause or contribute to a violation of the 1-hour standard for NO₂. Should the plant be built and it is subsequently determined that in fact violations are occurring as a result of the massive NO_x emissions from this plant, the State and the local air district will be responsible for developing a

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 5 of 24

plan for controlling emissions to meet the standard. Such a plan will require adoption of reasonably available control technology requirements for existing major sources. At that point, Avenal could be required to address these emissions in a much less cost-effective manner through the retrofit of the facility. Commenters recognize that this future is unknown, but this is a key reason why the modeling is required at the outset under section 165 in order to avoid these undesirable potential outcomes that could significantly harm public health and welfare. Waiving these requirements and pretending that there will be no problems undermines the “prevention” purpose of the PSD program and the policy choices made by Congress. It is simply not reasonable to believe that Congress could have intended EPA to adopt the stance of deliberate ignorance (by allowing the source and EPA to ignore foreseeable problems that the Clean Air Act is specifically designed to avoid) that EPA here proposes for Avenal.

C. EPA’s attempt to invent equitable authority based on case law is fundamentally flawed.

Having no statutory authority to waive Avenal’s requirement to comply with the plain statutory requirements of the Clean Air Act, EPA attempts to invent new “equitable” authority based on shoddy legal analysis of a single federal district court case from 50 years ago. In so doing, EPA attempts to set aside a long line of decisions that have addressed this very issue including decisions by EPA’s own Environmental Appeals Board. EPA’s analysis is based on a faulty understanding of the fundamental powers of the various branches of government and cannot be sustained.

Courts have consistently recognized that an agency is required to apply the law in effect at the time it renders a decision on a permit application. *See Ziffrin v. United States*, 318 U.S. 73,78 (1943) (where governing statute is amended after applicant submits his permit application but before agency renders its decision, agency is “required to act under the law as it existed” at the time of its decision rather than at the time of application); *see State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977) (appropriate standards to be applied to a permit are those in effect at time of initial permit issuance). *Ziffrin* involved a challenge to an order issued by the Interstate Commerce Commission denying a company’s permit application. *Ziffrin*, 318 U.S. at 74. After the company submitted its application but before the agency issued its decision, Congress amended a provision of the statute governing such permits. *Id.* Noting that the permit “was effective for the future,” the Court held that, even where the law changes after an applicant files a permit application, the Commission “was required to act under the law as it existed” when it entered its decision on the application. *Id.* at 78. Otherwise, reasoned the Court, “the administrative body would issue orders contrary to the existing legislation.” *Id.* EPA’s own Environmental Appeals Board has also recognized this basic rule. *See In re: Dominion Energy Bravton Point, LLC*, 12 E.A.D. 490, 614-616 (EAB 2006); *In re Phelps Dodge Corp.*, 10 E.A.D. 460,478 n. 10 (EAB 2002) (holding that the permit issuer is obligated “to apply the . . . statute and implementing regulations in effect at the time the final permit decision is made” or

PER 000090

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 6 of 24

the standards “in effect at the time of initial permit issuance.”);² *see also Shell Gulf of Mexico, Inc.*, OCS Appeal Nos. 10-01 through 10-04, Slip Op. at 9 and 67 n.76 (EAB, Dec. 30, 2010) (permit must meet emission limitation standards in effect when EPA issues its final permit decision under 40 C.F.R. § 124.15(a) upon conclusion of remand proceedings).

The Supplemental Statement of Basis also recognizes this clearly held maxim but then, without any attempt to explain why these cases are wrong or open to being ignored, simply announces that “some other courts have recognized an exception” Supplemental Statement of Basis at 9. EPA claims that the Latin maxim *actus curiae neminem gravabit*, as applied in the Supreme Court’s 1880 decision *Mitchell v. Overman*, 103 U.S. 62 (1880), provides judicial support for this supposed exception. *See* Supplemental Statement of Basis at 10. Translated to “*an act of the court shall prejudice no one*,” this Latin maxim stands for the principle that *a court* has the power to enter a judgment retrospectively when the court is responsible for creating a delay in rendering the judgment. *See Mitchell*, 103 U.S. at 64-65. EPA argues that this principle applies equally to courts and administrative agencies and “supports the view that an administrative agency has the power in limited and compelling circumstances to issue a permit decision based on the legal requirements that were applicable at the time the Agency should have taken action.” *See* Supplemental Statement of Basis at 10.

EPA’s attempt to rely on *Mitchell*, and the principle for which it stands, represents a basic misunderstanding of the inherent powers of the government branches. *Mitchell* speaks only to the powers of the judicial branch. *See Mitchell*, 103 U.S. at 64 (noting that because no statute applies, the case “must . . . be determined by the rules of practice which obtain in courts of justice in virtue of the inherent power they possess”). Article III of the United States Constitution vests the judicial branch with certain inherent powers and duties, including the duty “to say what the law is.” *Marbury v. Madison*, 5 U.S. 137, 177 (1803); U.S. Const. art. III, § 1 (“The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish.”). It has long been understood that “[c]ertain implied powers must necessarily result to our Courts of justice from the nature of their institution.” *United States v. Hudson*, 11 U.S. 32, 34 (1812). Courts are “universally acknowledged to be vested, by their very creation,” with certain inherent powers. *See Anderson v. Dunn*, 19 U.S. 204, 227 (1821). These powers are “governed not by rule or statute but by the control necessarily vested in courts to manage their own affairs.” *Link v. Wabash R. Co.*, 370 U.S. 626, 630-31 (1962). The concept of *actus curiae neminem gravabit* is itself founded on this inherent judicial authority to administer justice. *See Mitchell*, 103 U.S. at 65.

Administrative agencies, however, have no such inherent equitable powers. Courts have long held that administrative agencies do not possess the same powers or authority as Article III courts. *See N. Pipeline Const. Co. v. Marathon Pipe Line Co.*, 458 U.S. 50, 59 (1982). (“The

² The Guidance that EPA now seeks to overturn cites all of this same authority. *See* Memo from Stephen D. Page, Director, OAQPS, EPA, to EPA Regional Air Division Directors (April 1, 2010).

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 7 of 24

judicial power of the United States must be exercised by courts having the attributes prescribed in Art. III.”). An administrative agency is “a creature of statute.” *Soriano v. United States*, 494 F.2d 681, 683 (9th Cir. 1974). An agency “has no constitutional or common law existence or authority, but only those authorities conferred upon it by Congress.” *Michigan v. E.P.A.*, 268 F.3d 1075, 1081 (D.C. Cir. 2001); *see also Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988) (“It is axiomatic that an administrative agency’s power to promulgate legislative regulations is limited to the authority delegated by Congress.”). Thus, “if there is no statute conferring authority, a federal agency has none.” *Michigan*, 268 F.3d at 1081; *see also Louisiana Pub. Serv. Comm’n v. F.C.C.*, 476 U.S. 355, 374-75 (1986) (“An agency may not confer power upon itself.”).

EPA ignores this important distinction in its attempt to analogize a court’s inherent authority to retroactively render a judgment to an agency’s purported authority to waive statutory requirements in violation of existing law. EPA cannot compensate for its lack of statutory authority by relying on a Latin maxim or a judicial opinion discussing inherent judicial powers.

EPA cites only one case for the proposition that *actus curiae neminem gravabit* might be available to an administrative agency. *See* Supplemental Statement of Basis at 10 (citing *Application of Martini*, 184 F.Supp. 395, 401-02 (S.D.N.Y. 1960)). EPA’s reliance on this single district court case is weak and misplaced. *Martini* involved an application for naturalization in accordance with Public Law 114. *See id.* at 398. The petitioner submitted his application but, because of a delay by the Immigration and Natural Service (“INS”), was issued a warrant of arrest and ordered deported. *Id.* The INS examiner concluded that naturalization was barred by section 318 of the Immigration and Nationality Act, which automatically denies naturalization to applicants against whom a deportation order has been issued. *Id.* at 398-99. The court ultimately held, however, that section 318 did not apply to applicants under Public Law 114 and that Congress could not have intended the applicant to lose its rights under 114 as a result of agency delay. *Id.* at 399 and 401.

By allowing the applicant to take the necessary steps to attain naturalization, the court in *Martini* in no way permitted the agency to violate any statutory mandates. *See id.* at 399-400. The court reconciled its decision based on an analysis of what Congress intended. Even if EPA did possess powers available only to the judiciary, EPA could make no such claims here. Congress’s intent and purposes are clear. A source cannot be built if it fails to apply best available controls for all regulated pollutants and if it fails to demonstrate that it will not cause or contribute to a violation of any NAAQS. Nothing in *Martini* suggests that equitable considerations can be used to frustrate these requirements.

The remaining portion of the opinion, on which EPA’s proposal relies, is *dicta* suggesting that the applicant would be entitled to take the oath of allegiance *nunc pro tunc*. This discussion, however, does not stand for the proposition that an agency may remedy its own prejudicial delay by ignoring other statutory requirements. Even in this *dicta* discussing the principle of

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 8 of 24

actus curiae neminem gravabit, the court never insinuated that an agency has the power to apply this principle or the authority to remedy its own delay. Instead, *the court* applied *actus curiae neminem gravabit* to the agency delay. See *Martini*, 184 F.Supp. at 402; see also *Bradley v. Sch. Bd. of City of Richmond*, 416 U.S. 696, 711 (“a court is to apply the law in effect at the time it renders its decision, unless doing so would result in manifest injustice or there is statutory direction or legislative history to the contrary”). As noted above, administrative agencies have no inherent authority to fashion such equitable relief. Because the Clean Air Act does not give EPA the authority to issue permits “now as if it were then,” EPA has no such authority.

EPA’s final thin reed of support is based on *dicta* from the Court of Appeals for the Second Circuit, which EPA contends confirms “the viability of the principle applied in the *Martini* case where there has been a significant delay by an administrative agency.” See Supplemental Statement of Basis at 10 (citing *Fassilis v. Esperdy*, 301 F.2d 429 (2d Cir. 1962)). EPA incorrectly characterizes the earlier cases, which “the Second Circuit case did not question,” in the same way it mischaracterizes *Martini*.³ None of the cases referenced in *Fassilis* recognizes the power of an agency to violate statutory mandates, nor do any of these cases speak to the power of an agency to remedy its own delay. The cases referenced in *Fassilis* simply do not stand for the principle that “an administrative agency has the power . . . to issue a permit decision based on the legal requirements that were applicable at the time the agency should have taken action.” See Supplemental Statement of Basis at 10. Indeed, as EPA argued in response to Avenal’s deadline challenge, the case law, starting with *Ziffrin*, says the exact opposite – that the agency is to comply with the law in effect at the time of the final decision. See also Def’s Reply to P’s Opp. To Def’s Cross-Motion for Summ. J., Case No. 1:10-cv-00383 (RJL), at 15 (filed Oct. 22, 2010) (“Thus, *Alabama* supports EPA’s conclusion that it *must* apply the law in effect at the time the Region makes a decision on the permit, rather than the law in effect at the time the permit application is deemed complete.”) (emphasis added).

EPA fails to provide any judicial support for its purported authority to exempt Avenal’s permit application from the statutory requirements of the Clean Air Act. As EPA previously recognized not only in the Guidance it seeks to disavow but also in the pleadings in the ongoing litigation and in sworn declarations submitted in court, it has no choice but to apply the law in effect at the time it renders its final decision on Avenal’s permit application. EPA has failed to demonstrate an exception to this requirement because no such exception exists.

³ Indeed, *Mitchell* and *Application of Martini* are two of the six cases referenced in *Fassilis*. See *Fassilis*, 301 F.2d at 434. All but *Mitchell* are district court opinions involving immigration law. See *id.*

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 9 of 24

II. Even if EPA had equitable powers, the facts in this case do not justify the exemptions.

A. There were “no substantial delays on the part of the administrative agency which operated to deprive the applicants of any right to which any of them was entitled.”

Relying on *Martini* and *Fassilis*, EPA attempts to craft an equitable test which would empower it to waive the statutory requirements of the Clean Air Act where EPA has substantially delayed a permit application decision and allegedly deprived an applicant of a procedural right.⁴ See Supplemental Statement of Basis at 10. After describing this new and purportedly equitable test, however, the Supplemental Statement of Basis fails to apply it, and never shows that the facts in this case support application of the newly contrived test.

First, the Supplemental Statement of Basis never establishes that “there were substantial delays on the part of the administrative agency” See *Fassilis*, 301 F.2d at 434. EPA, in briefing supported by declarations made under penalty of perjury in the Avenal deadline litigation, explained:

As the Jordan Declaration and Joint Stipulation make clear, EPA Region 9 worked tirelessly to review materials submitted by the applicant before and after Region 9 deemed the application complete. See Joint Stipulation ¶ 6; Jordan Decl. ¶¶ 9-11. Region 9 also regularly contacted the U.S. Fish and Wildlife Service regarding the status of the Biological Opinion, which identified measures necessary to be incorporated into the permit to ensure the protection of the San Joaquin kit fox, an endangered species under the Endangered Species Act. *Id.*

Additionally, both Region 9 and Headquarters expended significant effort in an attempt to help [Avenal] identify what it needed to do to show compliance with the revised NO₂ NAAQS. See Joint Stipulation ¶ 6; Jordan Decl. ¶¶ 13-17; McCarthy Decl. ¶¶ 5-7.

⁴ Whether considerations of equity should play any part in PSD permitting is a highly dubious proposition. EPA’s mandate under the Clean Air Act is to protect the public’s health and welfare from air pollution and fulfill the other objectives specified in CAA section 160. EPA has no discretion to elevate the interests of a single permit applicant over those of the public based on EPA’s own notion of “fair play” or “equity.” Moreover, at least as to its obligation to comply with BACT for CO₂, neither EPA nor Avenal can mount a credible case of surprise. In response to comments seeking grandfathering for precisely the case at issue here – where a permit application has been completed before the date CO₂ BACT requirements go into effect – EPA itself twice expressly denied the availability of any grandfathering provisions for CO₂. See 75 Fed. Reg. 17004, 17018-21 (Apr. 2, 2010); 75 Fed. Reg. 31514, 31527 (June 3, 2010). Avenal has had ample notice of the fact that it must comply with these requirements and could have opted to do so, as EPA explicitly pointed out when it rejected the request for a grandfathering provision. See 75 Fed. Reg. at 17021.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 10 of 24

Def's Resp. to P's Supp. Br. Regarding Remedy, Case No. 1:10-cv-00383 (RJL), at 18 (filed March 1, 2011). Indeed, the record demonstrates that the bulk of the delay was the result of the section 7 consultation required under the Endangered Species Act. This consultation was not completed until August 9, 2010. See Letter from Susan K. Moore, U.S. Fish and Wildlife Service, to Gerardo C. Rios, EPA (Aug. 9, 2010). Thus the delay that held the permitting beyond the promulgation date of the new 1-hour NO₂ NAAQS was not within the control of EPA and there is no basis for treating it in the same way as the delay in *Martini*. See Def's Cross-Motion for Summ. J., Case No. 1:10-cv-00383 (RJL) (filed Sept. 17, 2010) ("[W]hile EPA regularly contacted FWS about the status of the Biological Opinion, EPA does not control the timing of FWS's issuance of its Biological Opinions."). This delay alone was enough to push the permit application process beyond the one-year mark EPA purportedly seeks to protect.

Nor can EPA claim that the delay has "operated to deprive the applicants of any right to which any of them was entitled." See *Fassilis*, 301 F.2d at 434. As EPA has itself recognized, Avenal has no right to comply with less protective air quality requirements based on the date of its application. See Def's Cross-Motion for Summ. J., Case No. 1:10-cv-00383 (RJL) (filed Sept. 17, 2010) ("[Avenal] has not established that it acquired any rights by virtue of the submission of its permit application or the determination by EPA that its application was complete. In fact, nothing in CAA section 165, or elsewhere in the Act, establishes that [Avenal] is entitled to a decision on its permit application on the basis of the laws and regulations in effect at the time the permit application was submitted or deemed complete, or indeed that [Avenal] is necessarily entitled to have EPA grant, rather than deny, its application."); see also *American Corn Grower Ass'n v. EPA*, 291 F.3d 1, 12 (D.C. Cir. 2002) (agreeing that "nothing in the CAA provides for issuance of a PSD permit as a matter of right"). Avenal's ability to pursue a permit has not been denied in any way.⁵ It is still free to submit the required demonstrations and attempt to show how the project will comply with the requirements of the Clean Air Act. Cf. *Martini*, 184 F. Supp. at 400-01 ("The filing of the preliminary form . . . was all that petitioner was able or entitled to do. After that petitioner could only wait to be called to take the oath of allegiance and this was entirely dependent on the speed of the administrative processes of the Naturalization Service."). EPA cannot reasonably claim that the test in *Martini* has been met where no rights have been denied as a result of a delay.

⁵ To the contrary, the delay has largely been to Avenal's benefit. EPA through this delay has allowed Avenal to supplement its application to support compliance with the Clean Air Act and the Endangered Species Act. See, e.g., Letter from Gary Rubenstein, Sierra Research, to Gerardo Rios, EPA (May 11, 2010) (outlining Avenal's responses to outstanding BACT and other issues identified by EPA). Had EPA aggressively applied the one-year deadline in section 165(c), EPA would have been forced to deny Avenal's permit application.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 11 of 24

B. Modeling of NO₂ was not a problem that could reasonably justify an exemption.

EPA tries to justify the proposed exemptions for Avenal based on “complications” with the implementation of the hourly NO₂ NAAQS. EPA’s careful wording of this discussion in the Supplemental Statement of Basis belies this phony justification. EPA first states in general language that “some applicants” seeking PSD permits have experienced unforeseen challenges and that “many permit applicants” need to conduct a cumulative air quality impact assessment where additional refinements in background concentrations “may also be necessary.” Supplemental Statement of Basis at 7-8. Without explaining how any of these concerns relate to Avenal, the Supplemental Statement of Basis asserts that [d]ue *in part* to these complications,” Avenal’s modeling efforts “produced unanticipated delays in the review of the permit application” *Id.* at 8.

Even if such complications could justify waiving statutory requirements, which they cannot, EPA has not made its case here. While “some applicants” have faced problems, others have been able to model 1-hour NO₂ concentrations in their PSD permit applications including Sunflower Electric Holcomb Station in Kansas, We Energies – Biomass Fueled Cogeneration Facility in Wisconsin, Mississippi Lime Kiln in Illinois, and Detroit Edison in Michigan. The Supplemental Statement of Basis provides no record basis for the conclusion that Avenal could not have completed its modeling demonstration or even what “part” of the delay was due to inherent modeling complications and what “part” was due to foot-dragging and ineptitude on the part of Avenal.

Indeed, before this Supplemental Statement of Basis invented the justification for this new exemption, Assistant Administrator Gina McCarthy and Region 9’s Air Division Director Deborah Jordan filed declarations under penalty of perjury claiming “both Region 9 and Headquarters expended significant effort in an attempt to help [Avenal] identify what it needed to do to show compliance with the revised NO₂ NAAQS. *See* Joint Stipulation ¶ 6; Jordan Decl. ¶¶13-17; McCarthy Decl. ¶¶5-7.” Def’s Resp. to P’s Supp. Br. Regarding Remedy, Case No. 1:10-cv-00383 (RJL), at 18 (filed March 1, 2011). EPA’s *post hoc* attempt to now excuse the 1-hour NO₂ modeling that it had pushed Avenal to conduct is without record support. To invent new unspecified “complications” as a reason for waiving statutory requirements is not only illegal but disingenuous.

C. Even assuming *arguendo* that Avenal’s permit must comply only with emission limitations in effect as of March 18, 2009, Avenal must nonetheless apply BACT to limit carbon dioxide emissions.

Even if EPA were to apply only those emission standards in effect on March 18, 2009 (one year after EPA declared Avenal’s permit application to be complete), Avenal’s final permit must still demonstrate the use of BACT to limit CO₂ emissions. This is the case because CO₂ was

PER 000096

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 12 of 24

a pollutant “subject to regulation” through the PSD permitting program as of March 18, 2009 – and indeed since 1993, when CO₂ monitoring and reporting regulations under the Act became effective.

The PSD permitting program requires the use of BACT to limit emissions “for each pollutant subject to regulation under [the Act].” CAA §§ 165(a)(4), 169(3) (emphasis added). EPA itself provided a “final” interpretation of the phrase “subject to regulation” as used in sections 165(a)(4) and 169(3) as early as 1978 when it stated that “subject to regulation under this Act” means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. 43 Fed. Reg. 26388, 26397 (June 19, 1978). As the Environmental Appeals Board found in *In re Deseret Power Electric Cooperative*, PSD Appeal No 07-03, Slip Op. at 41, (EAB, Nov. 13, 2008) (“*Deseret*”), this pronouncement does *not* support EPA’s later contention that BACT applies only to pollutants that are “‘subject to a statutory or regulatory provision that requires actual control of emissions of that pollutant.’” Instead, the 1978 Federal Register notice augers in favor of a finding that, in 1978, the Agency interpreted ‘subject to regulation under this Act’ to mean ‘any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type.’”

Monitoring and reporting regulations for pollutants are among the regulations in Subchapter C of Title 40 of the Code of Federal Regulations, and in 1993 – long before March 18, 2009 – EPA issued such regulations specifically for CO₂. See 58 Fed. Reg. 3590, 3650 (Jan. 11, 1993). These CO₂ regulations are found in 40 C.F.R. Part 75 (see 40 C.F.R. §§ 75.1, 75.10(a)(3), 75.57, 75.60-64) and were promulgated pursuant to Section 821 of the Act at the express direction of Congress, see 42 U.S.C. § 7651k note 3; Pub. L. 101-549; 104 Stat. 2699 (1990). That CO₂ monitoring and reporting regulations render this pollutant “subject to regulation” under the Act is underscored by the fact that Part 75 itself proclaims that a violation of any Part 75 requirement is a violation of the Act. 40 C.F.R. § 75.5(a). Plainly, CO₂ has been “subject to regulation” within the meaning of Sections 165(a)(4) and 169(3) since 1993, and certainly as of March 18, 2009.

EPA bases its contention that CO₂ emission limitations instead did not become effective until January 2, 2011 (and that Avenal therefore can avoid them as a result of the proposed grandfathering) on its rulemaking in *Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs; Final Rule* (the “Reconsideration”), 75 Fed. Reg. 17004 (April 2, 2010). In the proposed rulemaking preceding the Reconsideration, EPA had claimed that a pollutant does not become “subject to regulation” through monitoring and reporting regulations, but only through some other regulation under the Act, promulgated by EPA on a nationally applicable basis, that actually controls or restricts the pollutant’s emissions. 74 Fed. Reg. 51535 (Oct. 7, 2009) (“Proposed Reconsideration”). EPA then changed its definition once more by adding that, even after the promulgation of its rulemaking limiting CO₂ emissions from passenger vehicles and light duty trucks (the “Vehicle Rule”) in April 2010, CO₂ would still not be “subject to regulation” until the Vehicle Rule had “taken effect” by

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 13 of 24

affecting the “regulated activity” (rather than upon the Vehicle Rule’s promulgation or its effective date). 75 Fed. Reg. at 17016. EPA applied this otherwise incomprehensible definition to CO₂ emissions by announcing that the Vehicle Rule would “take effect” only when the regulated activity (allegedly only the sale of compliant vehicles but not their manufacture) would be affected: on January 2, 2011, the first day when yet another regulation permits vehicles built in compliance with the Vehicle Rule the year before to be sold in commerce. *Id.* at 17020.

EPA has crafted its ever more arbitrary statutory interpretations under intense political pressure to abandon or at least further postpone GHG regulations for stationary sources. These strenuous contortions do obvious violence to straightforward statutory language. The Reconsideration’s arbitrary and capricious nature is underscored by EPA’s own contradictions along the way.⁶ It should not now be used to avoid the application of BACT to limit CO₂ emissions from Avenal’s planned facility.

III. Even if EPA could ignore NO₂, SO₂, and CO₂ problems, it must still deny Avenal’s PSD permit application.

A. Environmental justice concerns justify rejection of the proposed project.

The Supplemental Statement of Basis attempts to address the failure of the previous Statement of Basis to consider environmental justice issues. *See in re: Shell Gulf of Mexico, Inc.*, OCS Appeal Nos. 10-01 through 10-04, Slip Op. at 63 (“The Board has held that environmental justice issues must be considered in connection with the issuance of PSD permits.”). The analysis offered in the Supplemental Statement of Basis, however, is inadequate in substance and effect. Even in its incomplete state, the analysis shows that there will be disproportionate impacts on surrounding environmental justice communities. As such, EPA should deny Avenal’s PSD permit application.

The Avenal Energy Project is proposed to be built and operated in Avenal, California, just a few miles from the environmental justice communities of Avenal, Huron, and Kettleman City. EPA admits that all three of these communities include “populations of interest” for the purposes of analyzing the impacts of the project on overburdened communities. As EPA explains in its environmental justice analysis, these communities have a very high (more than 85

⁶ *See, e.g.*, 74 Fed. Reg. at 51543 (pronouncing that pollutants subject to regulation means “those pollutants subject to a nationwide standard, binding in all states, that EPA promulgates on the basis of its CAA rulemaking authority”); *id.* at 51547 (explaining that CO₂ would become subject to regulation “upon final promulgation of the GHG light duty Vehicle Rule”); 74 Fed. Reg. 55292 (Oct. 27, 2009) (adding that “new pollutants become subject to PSD and title V when a rule controlling those pollutants is promulgated (and even before that rule takes effect)”; 75 Fed. Reg. at 55299.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 14 of 24

percent) minority population, are highly linguistically isolated, and are predominately low-income. They are also disproportionately impacted by pollution sources.

Even without a new 600-megawatt fossil fuel power plant, these communities are burdened by multiple environmental harms. The San Joaquin Valley is one of the worst-polluted air basins in the nation and suffers from “some of the highest PM_{2.5} levels in the country.” Supplemental Statement of Basis at 18. Drinking water in these rural communities is contaminated with high levels of arsenic, benzene and other toxins. Toxic pesticides and other agricultural chemicals applied to surrounding agricultural fields can drift into the homes and yards of local residents, many of whom also work in the fields. Additionally, as EPA points out, Kettleman City is located adjacent to the Interstate 5 freeway, defunct oil and natural gas extraction operations, and the state’s largest hazardous waste landfill, which was recently fined \$300,000 for violations of its PCB handling permit. Together, these impacts contribute to, among many other harms, higher-than-average asthma prevalence, asthma-related hospitalizations and emergency room visits. In these communities, which are also plagued by high unemployment and lack of access to health care, adding another major source of pollution would be the very definition of environmental injustice.

In its environmental justice analysis, EPA limits its examination of the impacts of the facility’s projected emissions to the effect they will have on the applicable NAAQS. Also, though it has decided to grandfather the facility from demonstrating compliance with the newly adopted 1-hour NO₂ standard, EPA does recognize that in promulgating the new standard, the agency found the existing annual NO₂ standard alone was not sufficient to protect public health against adverse respiratory effects associated with short-term NO₂ exposure, and so attempts to examine whether short-term NO₂ exposure from the proposed plant will disproportionately impact local communities. Ultimately, EPA determines that because the modeled results for the facility’s projected air emissions are well below the actual NAAQS for these pollutants, there will be no adverse impacts and it has satisfied its environmental justice obligations under Executive Order 12898. For the reasons set out below, commenters disagree and call upon EPA to do a real analysis of how pollution from the proposed plant would impact the health and well-being of the neighboring communities that are already environmentally-overburdened.

For the analysis of 1-hour NO₂ impacts, EPA identifies limited data indicating that background levels of 1-hour NO₂ concentrations “in the general area” are not disproportionately high as compared with the rest of the state. This information comes from monitors in Hanford (50 ppb) and Visalia (61 ppb), approximately 28 and 46 miles away (respectively) from the area where the plant will be located. EPA also examines an assessment conducted by the San Joaquin Valley Air Pollution Control District, which shows the maximum hourly NO₂ impact expected from the plant would be 44 ppb.

Even assuming the concentrations of NO₂ in Hanford or Visalia adequately represent the background NO₂ levels in the project vicinity, the added burden of the project would exceed or

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 15 of 24

very nearly exceed the new 1-hour NO₂ standard adopted by EPA. However, it is not reasonable to assume that these background levels are representative of levels in the project vicinity. As EPA points out, the largest source of NO₂ is mobile sources and “NO₂ concentrations on or near major roads are appreciably higher than those measured at monitors in the current network....and near-roadway concentrations have been measured to be approximately 30 to 100% higher than those measure away from major roads.” Supplemental Statement of Basis at 19. Kettleman City is directly adjacent to Interstate 5 – one of the State’s main commerce freeways – and therefore should reasonably be expected to have background levels of NO₂ of at least 65 ppb (30 percent greater than Hanford’s 50 ppb background level). In a “worst case” scenario, background levels in Kettleman City could be 130 ppb (100 percent greater than Visalia’s 65 ppb). Based on even the very limited information EPA provides in its environmental justice analysis, there is no reasonable basis for believing that Kettleman City or the other communities in the vicinity of the proposed project would not be disproportionately impacted by NO₂ emissions from the plant.

For its analysis of the other NAAQS, EPA’s environmental justice analysis misses the point entirely as it fails to take into account not only the local impacts of increased air emissions, but also how these added emissions will contribute to the cumulative impact of all the environmental and social stressors with which these communities are already burdened. Most notably, the analysis admits that it does not address whether there will be disproportionate impacts on the surrounding communities due to elevated ozone and fine particulate matter impacts. Instead of providing any of its own analysis, EPA “presents a summary of the State’s environmental justice analysis,” which the Supplemental Statement of Basis notes is the subject of a civil rights investigation. Supplemental Statement of Basis at 14. Greenaction for Health and Environmental Justice has filed a Title VI Civil Rights Act complaint alleging, *inter alia*, “that operation of the proposed Avenal power plant will result in adverse health impacts on the residents of color of Avenal and Kettleman City, who are already impacted by multiple sources of pollution.” *Id.* at 14. EPA’s Office of Civil Rights has accepted this allegation for investigation. *Id.* Relying on this flawed State analysis as the basis for EPA’s environmental justice analysis is unreasonable on its face.

Even setting aside the fact that this analysis is clouded by the pending investigation, EPA’s reliance on the State’s analysis is misplaced because of its obvious flaws. For example, the State claims that PM_{2.5} impacts will be insignificant compared to applicable ambient air quality standards and current levels. *See* Supplemental Statement of Basis at 28. Commenters have already advised EPA that this modeling analysis is flawed because the modeling results do not account for the contribution of secondary PM_{2.5} formation as a result of the significant NO_x emissions from the source. There is no basis for refusing to include secondarily formed PM_{2.5} in the assessment of ambient impacts. As EPA explained in its rulemaking proposing the increments of deterioration that it will allow, the Agency compared “the marginal pollutant concentration increases allowed by the safe harbor increment levels against the pollutant concentrations at which various environmental responses occur.” 72 Fed. Reg. at 54133. In

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 16 of 24

determining the scope of environmental effects, EPA “evaluated the health and welfare effects of both direct PM_{2.5} and secondarily-formed PM_{2.5} that may result from the transformation of other pollutants such as SO₂ and NO_x.” *Id.* at 54127. It would be irrational to suggest that notwithstanding the fact that the increments are based on an assessment of the impacts of both direct and secondary PM_{2.5}, the modeling to determine if such increments are violated or significantly impacted need only consider the directly emitted PM_{2.5}.

This approach is especially irrational here, where the District has already acknowledged that secondary PM_{2.5} in the form of ammonium nitrate is a major component of ambient PM_{2.5} concentrations in the San Joaquin Valley. *See* San Joaquin Valley Unified Air Pollution Control District, “2008 PM_{2.5} Plan,” at 3-7 (April 30, 2008) (adding that “ammonium nitrate formation is limited by the availability of nitric acid”); *see also id.* at 6-6 (noting District’s strategy is to “giv[e] priority to NO_x controls.”). The analysis of Avenal’s impact on ambient PM_{2.5} concentrations simply cannot ignore the addition of 144 tons per year of NO_x emissions in assessing whether the contribution to PM_{2.5} nonattainment in the Valley will be significant.

The State’s environmental justice analysis of particulate matter impacts is also flawed in that it “relies[s] on compliance with outdated science . . . [and] fail[s] to account for the updated scientific and technical reviews” *In re: Shell Gulf of Mexico, Inc.*, OCS Appeal Nos. 10-01 through 10-04, Slip Op. at 79-80. Both the PM_{2.5} and the PM₁₀ standards are undergoing review and have been called into question by EPA’s Clean Air Scientific Advisory Committee (“CASAC”). *See* CASAC Review of Policy Assessment for the Review of the PM NAAQS – Second External Review Draft (June 2010), Letter from Jonathan M. Samet, CASAC, to Lisa Jackson (dated Sept. 10, 2010) (available at [yosemite.epa.gov/sab/sabproduct.nsf/264cb1227d55e02c85257402007446a4/CCF9F4C0500C500F8525779D0073C593/\\$File/EPA-CASAC-10-015-unsigned.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/264cb1227d55e02c85257402007446a4/CCF9F4C0500C500F8525779D0073C593/$File/EPA-CASAC-10-015-unsigned.pdf)). To the State’s credit, it does look at a lower annual PM_{2.5} standard of 12 µg/m³, but it continues to rely on the 24-hour standard of 35 µg/m³, which CASAC has recommended tightening in conjunction with the annual standard. *See id.* at ii. More significantly, EPA’s analysis includes virtually no discussion of disproportionate PM₁₀ health impacts, including impacts resulting from the secondary formation due to the large NO_x emissions from the proposed plant, based on new available health data. *See* Supplemental Statement of Basis at 26. “CASAC supports a lower level [for the 24-hour PM₁₀ standard] to provide enhanced protection, somewhere in the range of 75 – 65 µg/m³.” *See* Letter from Jonathan M. Samet at ii (explaining that current standard of 150 µg/m³ translated into a 98th percentile form equates to a level of 75 to 80 µg/m³).

At a minimum, EPA needs to redo its defective and incomplete environmental justice analysis. Even with the flawed analysis prepared to date, however, it is clear that the Avenal project will have disproportionate health impacts on surrounding environmental justice communities. As such, EPA should deny Avenal’s application for a PSD permit. *See* CAA § 160(1) (noting purpose of PSD program is to protect public health and welfare . . . notwithstanding attainment and maintenance of all national ambient air quality standards).

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 17 of 24

B. Avenal has failed to demonstrate that it will not contribute to violations of the ozone and PM_{2.5} NAAQS in the Valley.

Clean Air Act section 165(a)(3) provides that a PSD permit may not be issued unless the facility proponent “*demonstrates . . . that emissions from the construction or operation of such facility will not cause, or contribute to, air pollution in excess of any . . . national ambient air quality standard in any air quality control region . . .*” (emphasis added); *see also* 40 CFR § 52.21(k)(1). The federal regulations require that the application for a PSD permit contain an analysis of ambient air quality in the area that the major source would affect for each pollutant emitted from the source in significant amounts. *Id.* § 52.21(m)(1)(a). The thresholds for determining whether emissions will be “significant” are provided in section 52.21(b)(23)(i) of the federal regulations. The threshold for PM_{2.5} emissions is 10 tons per year and for NO_x, as a precursor to both PM_{2.5} and ozone, is 40 tons per year. *Id.* § 52.21(b)(23)(i).

The proposed Avenal project will result in emissions of 80.7 tons per year of PM_{2.5} and 144.3 tons per year of NO_x. *See* “Avenal Energy Application for Certification,” at 6.2-45, Table 6.2-24. Yet nowhere in the proposed PSD permit nor the facility’s air quality analysis of its Application for Certification, is there any analysis of the impact the facility will have on ambient concentrations of ozone or PM_{2.5}.

Commenters are aware of the exemption provided in 40 CFR 52.21(i)(2), which waives regulatory source impact analysis and air quality analysis requirements with respect to pollutants for which the area is designated nonattainment. This exemption, however, does not excuse the failures here. While the regulatory requirements as to how to make the required demonstration may be waived, this exemption cannot waive the statutory requirement to make the demonstration at all. Such an application of this regulatory requirement would be a clear violation of the statute. Thus, even if, as a result of this exemption, EPA’s rules are silent as to *how* this demonstration must be made, the Act still requires a demonstration that the source will not cause or contribute to a violation of “any” NAAQS. Moreover, with respect to the regulatory requirements, EPA has only just designated the San Joaquin Valley with respect to the 24-hour 35 µg/m³ standard for PM_{2.5} and has not yet designated the Valley for the 75 parts per billion (“ppb”) standard for ozone. Thus to the extent there is any rationale behind the regulatory exemption, it is not present here because the area does not have plans for meeting these new standards that will assure that any growth in emissions is consistent with attainment. Nor, as will be discussed in more detail below, can EPA rely on the San Joaquin Valley Unified Air Pollution Control District’s dysfunctional nonattainment new source review program to fully offset these emissions. EPA cannot ignore the air pollution disaster in the San Joaquin Valley and approve this major new source without ensuring that it will not exacerbate the problems in the area.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 18 of 24

With respect to PM_{2.5} impacts, as commenters noted above, the modeling analysis is insufficient in that it fails to address secondary formation of fine particulate matter. The analysis of Avenal's impact on ambient PM_{2.5} concentrations simply cannot ignore the addition of 144 tons per year of NO_x emissions in assessing whether the contribution to PM_{2.5} nonattainment in the Valley will be significant.

For ozone, there is no discussion of ambient impacts whatsoever. Avenal's air quality analysis reports that 3-year average 8-hour ozone concentrations measured at the nearby Hanford monitoring site consistently exceed the 75 ppb standard. *See* "Avenal Energy Application for Certification" at 6.2-8 (reporting average concentrations of 95 ppb for 2004, 88 ppb for 2005 and 86 ppb for 2006). The analysis states that "ambient air quality measurements recorded at the monitoring stations are believed to represent area-wide ambient conditions rather than the localized impacts of any particular facility." *Id.* at 6.2-7. The analysis includes no other relevant discussion as to how the significant NO_x emissions from the Avenal plant will or will not contribute to the ozone problem in the area. EPA's proposed Statement of Basis offers nothing more. The analysis does not claim that the impact will be insignificant or completely offset; the analysis is simply silent with respect to ozone impacts. Commenters cannot meaningfully comment on how this proposed project fulfills the requirement of section 165(a)(3) when there is no demonstration to review.

Neither EPA nor Avenal has suggested that the impacts on ambient concentrations of PM_{2.5} and ozone will be offset, nor could they based on the current record. As noted above, the impacts on ambient ozone have never been assessed and the analysis of the impacts on ambient PM_{2.5} concentrations is defective. More importantly, neither EPA nor Avenal has provided any record for showing how the offsets obtained for this project will compensate for the impacts of this source. To the contrary, based on the record to date, it is clear that the emission reduction credits described by Avenal will provide no compensating benefit whatsoever to offset the new ambient impacts the Avenal plant will create.

The first problem with relying of the District's nonattainment new source review program to satisfy the requirement of section 165(a)(3) is that the nonattainment new source review program and the PSD program are fundamentally different when it comes to offsets. The nonattainment new source review program looks at the balancing of emissions increases and decreases as a kind of accounting problem based on tons of emissions. *See* CAA § 173(a) (focusing on "total tonnage" of emissions). This is particularly true for the District's new source review program. EPA has recognized that the District's program fails to comply with the requirements of the Clean Air Act by, among other things, allowing sources to offset only to preset thresholds rather than down to zero, failing to apply the ratios specified in the Act, and refusing to ensure that emission reductions are surplus at the time of use. *See* 66 Fed. Reg. 37587 (July 19, 2001). EPA has waived these statutory violations by allowing the District to demonstrate overall equivalency of the District's offset requirements to the requirements of the Clean Air Act. *See* 69 Fed. Reg. 27837 (May 17, 2004). This accounting approach has no relation

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 19 of 24

to what is actually happening in the ambient air. Moreover, while the equivalency approach relied upon in the District might have been theoretically viable at the time EPA approved it, the approach has become bankrupt with the District's bump up to extreme nonattainment for ozone in 2004. Since then, the federal rules should have been requiring offsets for sources with NO_x or VOC emissions over 10 tons per year, but the District has not been applying these lower thresholds in its annual equivalency demonstration. At this point, there is no rational basis for believing that the District is achieving all of the emission reductions needed even to meet the accounting requirement of Clean Air Act section 173(a).

The requirements in section 165(a)(3) and 51.165(b)(3), by contrast, focus on "air pollution" and the "impact" on "air quality" as opposed to merely the tons of emissions. This difference is often used to the advantage of sources seeking a PSD permit by allowing them to claim that their significant impacts can be mitigated through less than complete offset of their emissions. Here, however, because the District allows sources to use offsets that are worthless in their benefit to air quality, the requirements of section 165(a)(3) cannot be met through the bankrupt accounting games approved for the nonattainment new source review program in the San Joaquin Valley.

In its original Final Determination of Compliance ("FDOC") document for Avenal, the District calculated what it asserts are acceptable offset targets for the project's NO_x, VOC, and PM₁₀ emissions. The District established these offset targets as the project's total emissions, minus any emissions from exempt equipment, minus an 'offset threshold' for each pollutant, times a distance offset ratio of 1.5:1 (because the reductions used as offsets took place more than 15 miles from the Avenal project). Additionally, the District allowed the substitution of SO_x emission reduction credits to offset PM-10 emissions at a 1:1 ratio.

As noted above, this calculation of the emission reduction credits ("ERCs") needed to offset the tons of emission increases that will be generated by Avenal includes no analysis of the actual impact the proposed project will have on air quality or the mitigation of that impact that will be provided by the ERCs. As explained by the CEC in a letter dated August 12, 2008, the applicant's proposed mitigation includes the use of ERCs issued between 1991 and 2002. While the District may allow the use of these very old ERCs to satisfy the accounting requirements of its defective nonattainment new source review program, for PSD purposes, the reductions represented by these ERCs are already reflected in the current ambient air quality concentrations used to assess Avenal's projected impact. Neither EPA nor the District has demonstrated how emissions reductions that are already reflected in current air quality levels, which continue to violate the national standards, can be used to show that the new emissions from the proposed project will not cause or contribute to a violation of any NAAQS in the project impact area.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 20 of 24

In addition, as the District has pointed out, the reductions being used as offsets took place well outside the proposed project site. In fact, as far as commenters can tell⁷, a majority of the reductions took place more than 75 miles away from the proposed project location. Without performing modeling or other technical analysis to show how these distant reductions can possibly offset the impact of the new emissions on the project impact area, EPA cannot conclude that the ERCs identified by the applicant adequately prevent the project from causing or contributing to a violation of any NAAQS.

Finally, even if the temporal and spatial defects of these offsets could be ignored, the emission reductions suffer from the further defect that the District relies on inter-pollutant trading that has no rational basis. The District has allowed Avenal to comply with the nonattainment new source review requirements for PM_{2.5} offsets by substituting SO_x emission reductions on a 1 to 1 basis (this ratio becomes 1.5 to 1 when factoring in the distance offset ratio). This ratio is entirely unsupported by the record. EPA, in its new source review rulemaking for PM_{2.5}, determined a nationwide preferred ratio of 40 to 1 for trading SO_x emission reductions for PM_{2.5} emission reductions, unless a demonstration can be made, substantiated “by modeling and/or other technical demonstrations of the net air quality benefit for PM_{2.5} ambient concentrations,” that another ratio is locally appropriate. 73 Fed. Reg. 28321, 28339 (May 16, 2008). According to EPA, these local determinations must address a number of local factors, including but not limited to: 1) the relative magnitude of emissions of direct PM_{2.5} and precursor gases within the geographic area, 2) the relative contribution to local PM_{2.5} nonattainment of directly emitted PM_{2.5} and individual precursors from the various sources or source categories under consideration as part of a potential inter-pollutant trade, and 3) the meteorological conditions and topography of the area, which result in different source-receptor relationships across pollutants within the local area. *Id.* The District has never made any such demonstration to justify the lower ratio applied here.⁸ Given the total absence of analysis supporting a 1 to 1 benefit ratio for SO_x emission reductions, EPA simply cannot reasonably rely on the SO_x ERCs required by the District to meet the requirements 165(a)(3) for PM_{2.5}.

In the end, the analysis conducted to date on the ambient impacts of the Avenal plant is insufficient to “demonstrate[]” that emissions will not cause or contribute to air pollution in excess of the ozone or PM_{2.5} NAAQS. *See* CAA § 165(a)(3). Should EPA and Avenal persist in

⁷ Despite an August 12, 2008 request by the CEC, a full description of the original emission reduction site and date, and the method of reduction for the ERCs was never provided by the applicant or the District. In fact, a number of the ERCs listed in the FDOC do not even appear on the District’s Emission Reduction Credits Registry.

⁸ As EPA pointed out in comments on another San Joaquin Valley power plant project, the District’s “methodology” for determining appropriate inter-pollutant ratios has never been approved by EPA. *See* EPA’s May 21, 2009 Comments on Project Number N-1083212 (“the underlying methodology to determine the appropriate ratios for inter-pollutant offsets has not been approved by EPA . . . It is important to note that modeling is a critical component of an inter-pollutant offset analysis . . .”).

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 21 of 24

trying to claim that this new major source of pollution will contribute only insignificantly to ongoing violations of the ozone and PM_{2.5} NAAQS, EPA must work with Avenal to prepare an adequate analysis and circulate that analysis for public review and comment. In the meantime, EPA should deny Avenal's PSD application for failing to comply with Clean Air Act 165(a)(3) and 40 C.F.R. section 52.21(k)(1).

C. EPA should reject Avenal's PSD permit application because less harmful alternatives to the project are available.

The foregoing descriptions of the failures of Avenal and EPA to adequately assess the impacts of the proposed project highlight the need to for EPA to explore alternatives to the proposed project. Section 165(a)(2) provides that the permitting decision should consider "the air quality impact of [the] source, alternatives thereto, control technology requirements, and other appropriate considerations" *See also* Gregory B. Foote, "Considering Alternatives: The Case for Limiting CO₂ Emissions From New Power Plants Through New Source Review," 34 *Env'tl. Law Rep.* 10642, 10650 (2004) ("By expressly providing citizens with the right to call upon the permitting authority to consider 'alternatives' to the proposed source, Congress clearly intended that the permitting authority could conclude that a source different from the one proposed by the applicant – or no new source at all – should be permitted."). The analysis of BACT also requires consideration of alternatives based on "energy, environmental, and economic impacts." *See* CAA § 169(3). As Congress explained:

[W]hen an analysis of energy, economics, or environmental considerations indicates that the impact of a major facility could alter the character of that community, then the [permitting agency] could, after considering those impacts, reject the application or condition it within the desires of the State or local community.

S. REP. NO. 95-127, at 31 (1977).

Not considered or mentioned in any of EPA's analysis is the fact that Avenal has applied for and received a permit from the San Joaquin Valley Air District that would limit emissions so as to avoid the necessity for a major source PSD permit. *See* SJVUAPCD, "Final Determination of Compliance (FDOC), Project Number C-1100751 – Avenal Power Center LLC (08-AFC-01)" (Dec. 17, 2010) (reducing NO_x emissions from 288,618 lb/year to 198,840 lb/year and CO emissions from 1,205,418 lb/year to 197, 928 lb/year). In other words, a specific, feasible alternative to the proposed project has been identified by Avenal itself. EPA cannot claim that it has fully complied with sections 160(1), 165(a)(2) or 169(3) when it has failed to consider this available alternative that would lower total emissions. EPA should use its authority to consider the environmental justice and other impacts, and to protect public health and welfare, as a basis for rejecting Avenal's PSD application since there is a demonstrated alternative that will lower the emissions from this project.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 22 of 24

IV. EPA's proposed decision suffers from various procedural defects.

A. The Regional Administrator's responsibility for making the permitting decision cannot be redelegated without rulemaking.

On March 1, 2011, Administrator Jackson issued a memo temporarily delegating permitting authority to the Assistant Administrator for Air and Radiation. While the Administrator may have the ability to modify the Headquarters Delegation Manual through the issuance of such a memorandum, she cannot rewrite the applicable regulations governing issuance of such PSD permits without conducting new notice and comment rulemaking. Currently 40 C.F.R. § 124.15 provides "After the close of the public comment period under §124.10 on a draft permit, *the Regional Administrator* shall issue a final permit decision . . ." (emphasis added); *see also* 40 CFR § 124.19(f)(2) (reiterating that the "final permit decision shall be issued by the Regional Administrator . . ."). Unlike other regulatory provisions that provide for "EPA" action, which is then subject to definition through the delegation manual, here the regulations expressly provide that it is the Regional Administrator who will issue the permit. The plain text of the regulations cannot be changed, and indeed was not even purported to be changed, by the Administrator's March 1, 2011 memorandum. Without new rulemaking, the Regional Administrator must issue the final permit decision. *See United States v. Nixon*, 418 U.S. 683, 695-96 (1974) ("So long as [a] regulation is extant it has the force of law"); *see also Am. Fed'n of Gov't Employees, AFL-CIO, Local 3090 v. Fed. Labor Relations Auth.*, 777 F.2d 751, 759 (D.C. Cir. 1985) (holding that "unless and until [an agency] amends or repeals a valid legislative rule or regulation, [the] agency is bound by such a rule or regulation").

B. The proposed revisions of statutory interpretations require rulemaking governing implementation of the NAAQS and PSD program, neither of which can be done through a permitting action approved by the Assistant Administrator.

The Supplemental Statement of Basis acknowledges that it seeks to reverse various EPA interpretations of the Clean Air Act and EPA's regulations announced in prior rulemakings and guidance documents. *See* Supplemental Statement of Basis at 11. As noted above, these requirements derive from the plain language of the statute and therefore cannot be changed by EPA at all. Even assuming these requirements were subject to reinterpretation, EPA's attempt to do so in the context of this permitting decision is improper and illegal.

EPA acknowledges that public comment is necessary to reverse its prior pronouncements, but EPA asserts that all that is required is an opportunity for public comment on the proposed Avenal permit decision. This is not the rule from *Paralyzed Veterans of America v. D.C. Arena L.P.*, 117 F.3d 579 (D.C. Cir. 1997). The court there explained, "Once an agency gives its regulations an interpretation, it can only change that interpretation as it would modify

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 23 of 24

the regulation itself: through notice and comment rulemaking.” *Id.* at 586; *see also id.* (“To allow an agency to make a fundamental change in its interpretation of a substantive regulation without notice and comment obviously would undermine those APA requirements. That is surely why the Supreme Court has noted (in dicta) that APA rulemaking is required where an interpretation ‘adopts a new position inconsistent with . . . existing regulations.’ *Shalala v. Guernsey Memorial Hosp.*, 514 U.S. 87, 100 (1995).”). EPA’s circulation of a Supplemental Statement of Basis does not satisfy APA rulemaking requirements and is thus insufficient to revise the previously announced interpretations requiring compliance with NO₂ and SO₂ NAAQS and the application of BACT for greenhouse gas emissions.

EPA’s proposed policy change is not based on the facts before it in this permit, where limited notice might be sufficient. The authority that EPA claims it possesses to waive statutory requirements is a legal conclusion, not a factual determination limited to this permit. Like the adjudication in *Shell Offshore Inc. v. Babbitt*, 238 F.3d 622 (5th Cir. 2001), where the court found the agency’s decision “was the result of a departure from previous [agency] practice” and where the agency “did not apply a general regulation to the specific facts of [the] case” but instead “established a new policy” and then applied that to the case before it and others, EPA here has acknowledged that this new grandfather interpretation will apply to many facilities. *See id.* at 628; *see also* “EPA Plan to ‘Grandfather’ Key Air Permit Raises Major Legal, Policy Queries,” InsideEPA.Com (March 7, 2011) (available at: <http://insideepa.com/Inside-EPA/Inside-EPA-03/04/2011/epa-plan-to-grandfather-key-air-permit-raises-major-legal-policy-queries/menu-id-153.html>) (reporting that “[Assistant Administrator] McCarthy noted EPA would apply the policy to other permits in similar situations but has not yet identified them, except to say it expects it will affect 10 to 20 permits nationwide.”). These are national policies that EPA is attempting to reverse. As a result, the APA provides that notice of such rulemakings “shall be published in the Federal Register . . .” 5 U.S.C. § 553(b). Moreover, such rulemaking cannot be conducted by either the Regional Administrator or the Assistant Administrator for the Office of Air and Radiation. These agency officials have no such delegated authority to adopt or revise national rulemakings governing the implementation of the PSD program or the new NAAQS. Until national rulemaking is completed in accordance with the APA, EPA cannot apply its desired new exemptions in this permitting decision.

Comments on Avenal Supplemental Statement of Basis

April 12, 2011

Page 24 of 24

V. Conclusion

EPA should have denied the Avenal PSD permit application long ago. It is the wrong project in the wrong place. Rather than do the damage to the Clean Air Act that EPA has proposed, commenters urge EPA to end this unfortunate and unseemly process by finally denying Avenal's PSD permit application.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Cort". The signature is fluid and cursive, with the first name "Paul" being more prominent than the last name "Cort".

Paul Cort

Staff Attorney

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AVENAL POWER CENTER, LLC,

Plaintiff,

v.

U.S. ENVIRONMENTAL PROTECTION
AGENCY, *et al.*,

Defendants.

Civ. Action No. 10cv383 (RJL)

MEMORANDUM OPINION

(May 26 2010) [##12, 14]

Avenal Power Center, LLC (“plaintiff”) brings this action against the U.S. Environmental Protection Agency (“EPA”) and Lisa P. Jackson, Administrator of the EPA (“Administrator” and collectively “defendants”) for violation of Section 165(c) of the Clean Air Act (“CAA”). Section 165(c) requires the EPA to grant or deny specified permit applications within one year. While the parties agree that the EPA has violated its duty to render a final decision within one year under Section 165(c), the parties disagree as to the appropriate remedy that the Court can, and should, impose. On March 16, 2011, the Court heard oral argument on this question. The EPA, in essence, argues that notwithstanding Congress’ one-year statutory time limit (established in 1977) for a final agency action, the most the Administrator could now be required to do is issue a decision that is appealable to the Environmental Appeals Board (“EAB”): a review process enacted by regulation in 1992 for the assistance of the Administrator, that the EPA freely

concedes could take anywhere from six to eighteen months, or longer, to complete. In effect, the EPA contends that this subsequently-enacted regulatory review process *trumps* Congress' one-year statutory deadline and, as such, the most that this Court can do is require the agency to issue an appealable interim decision within the one-year statutory period. Upon consideration of the parties' pleadings, including parties' supplemental briefs on this question, oral argument, and the record herein, the Court disagrees with the defendants' position and, therefore, GRANTS, in part, plaintiff's Motion for Judgment on the Pleadings, and DENIES defendants' Motion for Summary Judgment. Accordingly, it is ORDERED that the EPA Administrator issue a final, non-appealable, agency action, either granting or denying plaintiff's permit application, no later than August 27, 2011.¹

BACKGROUND

Avenal Power Center, LLC currently seeks to develop and build a state of the art 600 megawatt natural gas-fired power plant, the Avenal Energy Project. *Jt. Stips.* ¶¶ 1-3, *Jt. Stmt. Re. Case Mgmt. and Sched., Ex. 1* [#11]. To this end, plaintiff submitted, in February 2008 to the EPA, a Prevention of Significant Deterioration ("PSD") permit application. The application was deemed complete on March 19, 2008. *Id.* ¶¶ 3-5.

Almost *two years later*, however, after an elaborate and exhaustive EPA administrative process, which included a notice and comment period and public hearing, the plaintiff

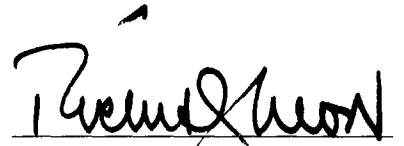
¹ The Court reserves judgment with respect to plaintiff's request for attorney's fees and costs. In addition, in light of the February 4, 2011 declaration by Regina McCarthy, Assistant Administrator of the EPA's Office of Air and Radiation, which was released after plaintiff filed its Motion, as well as subsequent briefs and oral argument, the relief sought by plaintiff has been accordingly revised.

Carolina v. EPA, 531 F.3d 896, 922 (D.C. Cir. 2008) (citing *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001)). To the extent that a regulatory process frustrates or renders meaningless a Congressional statutory mandate, it must yield to Congress's will. See *Ernst & Ernst v. Hochfelder*, 425 U. S. at 213-14; *Fed. Maritime Com. v. Seatrain Lines, Inc.*, 411 U.S. 726, 745 (1973); see also *Southland Royalty Co. v. Fed. Energy Admin.*, 512 F. Supp. 436, 446 (N.D. Tex. 1980). Thus, while the Administrator is welcome to avail herself of whatever assistance the EAB can provide her *within the one-year statutory period*, she cannot use that process as an excuse, or haven, to avoid statutory compliance.

Accordingly, the Administrator, in this Court's judgment, must issue a truly final decision, either granting or denying the permit in question as soon as possible. Regrettably her offer to issue an interim appealable decision by May 27, 2011 is patently inadequate as it has already exceeded Congress's mandate by some three years and undoubtedly would attenuate the process for yet another six to eighteen months. However, recognizing that the Administrator might need a brief additional period of time to determine how to best proceed vis-à-vis the existing EAB review process, the Court will extend the Administrator an additional 90 days to issue her final decision, either with or without the EAB's involvement.

CONCLUSION

Accordingly, for the foregoing reasons, it is ORDERED that the Administrator of the EPA issue a final decision granting or denying the plaintiff's permit no later than August 27, 2011. An order consistent with this decision accompanies this Memorandum Opinion.



RICHARD J. LEON
United States District Judge

**PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
ISSUED PURSUANT TO THE
REQUIREMENTS AT 40 CFR § 52.21**

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION IX

PSD PERMIT NUMBER: SJ 08-01

PERMITTEE: Avenal Power Center, LLC
500 Dallas Street, Level 31
Houston, Texas 77002

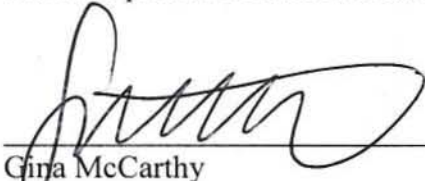
FACILITY NAME: Avenal Energy Project

FACILITY LOCATION: 33119 Avenal Cutoff Road
Avenal, California 93204

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, Part C (42 U.S.C. Section 7470, *et. seq.*), and the Code of Federal Regulations (CFR) Title 40, Section 52.21, the U.S. Environmental Protection Agency, Region 9 is issuing a *Prevention of Significant Deterioration* (PSD) permit to the Avenal Power Center, LLC (APC). The Permit applies to the construction and operation of a new 600 megawatt (MW, nominal) natural gas-fired combined-cycle power plant known as the Avenal Energy Project (AEP) in Avenal, California.

APC is authorized to construct and operate the AEP power plant as described herein, in accordance with the permit application (and plans submitted with the permit application), the federal PSD regulations at 40 CFR § 52.21, and other terms and conditions set forth in this PSD Permit. Failure to comply with any condition or term set forth in this PSD Permit may result in enforcement action pursuant to Section 113 of the Clean Air Act (CAA). This PSD Permit does not relieve APC from the responsibility to comply with any other applicable provisions of the CAA (including applicable implementing regulations in 40 CFR Parts 51, 52, 60, 61, 63, and 72 through 75), or other federal, state, and San Joaquin Valley Air Pollution Control District (District) requirements.

Per 40 CFR § 124.15(b), this PSD Permit becomes effective 30 days after the service of notice of this final permit decision unless review is requested on the permit pursuant to 40 CFR § 124.19.


Gina McCarthy
Assistant Administrator

5/27/11
Date

**AVENAL ENERGY PROJECT (SJ 08-01)
PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
FINAL PERMIT CONDITIONS**

PROJECT DESCRIPTION

The Facility is a combined-cycle power plant capable of generating up to 600 megawatts (MW, nominal) of net power. Electrical power will be generated from the combustion of natural gas in two 180 MW (nominal) combustion turbine generators (CTG). Exhaust from each gas turbine will flow through a dedicated Heat Recovery Steam Generator (HRSG) to produce steam to power a shared 300 MW (nominal) Steam Turbine Generator (STG). Each HRSG will be equipped with natural gas-fired duct burners to augment steam production during peaking operation. Each of the CTGs will be equipped with dry low-NO_x (DLN) combustors. The Facility will install selective catalytic reduction (SCR) and oxidation catalyst (Ox-Cat) systems. Additional equipment includes a natural gas-fired auxiliary boiler, which is used to provide steam for auxiliary purposes such as when the plant is off-line or during startup, equipped with an ultra low-NO_x burner, a natural gas-fired emergency generator equipped with a post-combustion integrated SCR/oxidation catalyst system, and a diesel-fired emergency firewater pump engine with a turbocharger and an intercooler/aftercooler.

The Facility is subject to the Prevention of Significant Deterioration (PSD) Program for emissions of Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Particulate Matter (PM), and Particulate Matter of less than or equal to 10 micrometers (µm) in diameter (PM₁₀).

EQUIPMENT LIST

The following devices are subject to this PSD permit:

Unit ID	Description
GEN1	<ul style="list-style-type: none"> • 180 MW Combustion Turbine Generator (CTG), with a maximum heat input rate of 1,856.3 MMBtu/hr, high heating value (HHV) • Natural gas-fired General Electric Model Frame 7FA • Vented to a dedicated Heat Recovery Steam Generator (HRSG) and a 300 MW Steam Turbine Generator (STG) shared with GEN2 • Emissions of NO_x and CO controlled by Dry Low-NO_x (DLN) Combustors, Selective Catalytic Reduction (SCR), and an Oxidation Catalyst (Ox-Cat)
GEN2	<ul style="list-style-type: none"> • 180 MW CTG, with a maximum heat input rate of 1,856.3 MMBtu/hr (HHV) • Natural gas-fired General Electric Model Frame 7FA • Vented to a dedicated HRSG and a 300 MW STG shared with GEN1 • Emissions of NO_x and CO controlled by DLN combustors, SCR and an Ox-Cat

US Environmental Protection Agency
May 2011

Responses to Public Comments

on the Proposed Prevention of Significant
Deterioration Permit for the Avenal Energy Project

Contents

I. INTRODUCTION	3
A. OVERVIEW	3
B. SUMMARY OF THE FORMAL PUBLIC PARTICIPATION PROCESS	9
C. RECENT COURT DECISION	10
II. EPA’S RESPONSES TO THE PUBLIC COMMENTS.....	11
A. COMMENTS SUBMITTED DURING THE FIRST PUBLIC COMMENT PERIOD (JUNE 16, 2009 – OCTOBER 15, 2009).....	11
1. <i>Written Comments</i>	11
2. <i>Comments Received at EPA’s October 1, 2009 Public Hearing</i>	46
3. <i>Comments Received at EPA’s October 15, 2009 Public Hearing</i>	48
B. COMMENTS SUBMITTED DURING THE SECOND PUBLIC COMMENT PERIOD (MARCH 4, 2011 - APRIL 12, 2011).....	53
1. <i>Written Comments</i>	53
2. <i>Comments Received at EPA’s April 12, 2011 Public Hearing</i>	104
III. CLARIFICATIONS AND ERRATA CORRECTIONS IN FINAL PERMIT.....	108
APPENDIX A	111

I. Introduction

A. Overview

On June 16, 2009, the United States Environmental Protection Agency Region 9 (EPA Region 9) proposed to issue a Prevention of Significant Deterioration (PSD) permit to Avenal Power Center, LLC (“Avenal”, “APC” or “Applicant”) that would authorize construction and operation of a 600 megawatt natural gas-fueled combined cycle power plant known as the Avenal Energy Project (“the Project”), in Kings County, California. After carefully considering public input and the potential impact of the Project on air quality in the affected community, EPA is issuing a Clean Air Act (CAA) PSD permit for it, which authorizes construction and operation of the Project on the condition that the source may not emit air pollutants in excess of the levels specified in the permit and that the source complies with other terms of the permit. The Project is a new, state-of-the-art, natural gas-fired electric generating facility that will apply modern pollution control technology to achieve the lowest levels of air pollutant emissions achievable in this instance. The applicant has satisfied the applicable standards in the CAA and EPA regulations for obtaining this permit.¹ Although the area where the Project will be located is subject to a number of environmental burdens, the available information does not suggest that the relatively low levels of emissions from this source will exacerbate these existing burdens to a degree that should affect issuance of this permit. On balance, considering the full scope of actions that EPA and other agencies are actively taking to reduce more significant environmental hazards in the San Joaquin Valley and affected communities, EPA’s judgment is that construction and operation of the Project should be authorized under the laws that EPA is responsible for administering in this instance.

As required by the CAA, the conditions in this PSD permit are applicable to a subset of the air pollutants that will be emitted from the Project. These are the pollutants that the Project has the potential to emit above designated levels for which the local area is either meeting the National Ambient Air Quality Standards (NAAQS) or is unclassifiable with respect to these standards. The conditions in the permit are based on the use of Best Available Control Technology (BACT) to limit emissions of carbon monoxide (CO), nitrogen dioxide (NO₂), particulate matter (PM), and PM equal to or less than 10 micrometers in diameter (PM₁₀) to the greatest extent feasible. The available information indicates that with this technology installed, the Project will have a relatively minor effect on air quality. The Project’s impacts are well below (in all cases, less than 6 percent of) the applicable NAAQS for the pollutants addressed in the PSD permit. Consistent with the provisions of the CAA, EPA’s permit does not contain limitations on the air pollutants (including precursors to the formation of these pollutants) for which the relevant area is not attaining the NAAQS. Emissions of these nonattainment pollutants – ozone and PM equal to or less than 2.5 micrometers in diameter (“fine particulate matter” or “PM_{2.5}”) – are regulated under the Nonattainment New Source Review (NSR) permitting program administered by the San Joaquin Valley Air Pollution Control District (the District).

¹ Because we are grandfathering the Project from requirements stemming from the 1-hour NO₂ and SO₂ NAAQS, when we use the term “applicable NAAQS” and “applicable pollutants” or “pollutants regulated under the permit” we mean to exclude the 1-hour NO₂ and SO₂ NAAQS.

EPA's review of this permit application has continued for two years beyond the one-year deadline established in the CAA for EPA to grant or deny the application. In light of this and other factors, EPA has determined that is appropriate and equitable under the circumstances to exercise available discretion under the CAA to issue this permit without requiring this applicant to meet recently-adopted requirements that have taken effect during the lengthy period of time that EPA has been reviewing this application.

EPA has listened carefully to the concerns of nearby residents, including those of the nearby communities of Avenal, Huron and Kettleman City who are understandably worried that adding an additional source of pollution in this area would make existing environmental problems worse. The San Joaquin Valley has some of the highest ozone and PM_{2.5} levels in the country. Furthermore, local residents are concerned about health risks from drinking water contamination, exposure to pesticides and other agricultural chemicals, air pollutant emissions from vehicles on the I-5 freeway, the effects of defunct oil and gas extraction operations, the proximity to a hazardous waste disposal facility and composting and the application of biosolids sludge from Los Angeles. There are reports of higher-than-average asthma rates, birth defects and miscarriages among local residents. EPA has met with community representatives regarding a number of concerns, outside the context of EPA's PSD permitting action for the Project, and to help protect the community a number of EPA Program Offices have focused resources on following up appropriately on the community's concerns.

Many residents and environmental organizations have urged EPA to ensure that we take action in the context of this permit application to alleviate these environmental conditions and to assure them that the construction and operation of the Project will not make matters worse. We have also heard that EPA's decision to grandfather this permit application from certain newly enacted requirements has undermined the confidence of some citizens in EPA's commitment to doing our job to protect public health and welfare in the affected communities. At the same time, EPA has also heard the concerns expressed by the permit applicant about EPA's failure to complete action on this application in a timely manner, as required by the CAA. The applicant has emphasized the impact of this delay on its proposal to supply electrical power and the inequities of extending this delay by requiring the applicant to address a series of additional requirements that were not applicable at the time the permit application was completed and when EPA initially proposed to issue this permit.

EPA is also sensitive to the fact that the many residents in the communities adjacent to the Project are minorities and have low incomes. These communities have high unemployment rates and many residents lack access to healthcare. Executive Order 12898 provides that "[t]o the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States." Section 1-101 of Exec. Order 12898, 59 FR 7629 (Feb. 16, 1994). EPA has recognized the need to consider EJ in the PSD permitting process and to ensure public participation, and has further recognized an obligation to respond to public comments. Thus, the public comments, including comments on "alternatives" and "other appropriate considerations" under section

165(a)(2) of the CAA may provide EPA with a basis for incorporating environmental justice considerations into PSD permitting decisions in appropriate circumstances. Based on the Executive Order and prior actions by EPA applying this order, EPA has considered environmental justice issues in connection with the issuance of this PSD permit. Since this Executive Order references all of the programs, policies and activities of each federal agency to which it applies, EPA has considered how best to respond to the environmental justice concerns raised in public comments within the larger context of all the actions EPA is taking to reduce actual or potential environmental hazards in the communities potentially affected by emissions from the Project. EPA also believes it is appropriate to consider actions being taken by State and local government agencies to address these concerns.

Considering the environmental conditions of greatest significance in this region and the range of actions EPA and State and local government agencies are currently taking to reduce the risks these conditions pose to health and welfare in these communities, EPA's judgment is that, despite some uncertainties and limitations in available data, emissions from this source are unlikely to add significant environmental harm to the local communities. EPA has not identified disproportionate adverse impacts on minority communities and low-income communities from the Project that should affect issuance of this permit. To the extent environmental concerns already exist, EPA believes they are more effectively addressed through other actions EPA and State and local agencies are taking outside the context of this permit application. As discussed below, EPA and the State have taken numerous actions to respond to the communities' concerns about the environmental challenges and burdens they currently face.

EPA and the State have recently undertaken several actions to respond to communities' concerns about birth defects, stillbirths and miscarriages in the area, as well as concerns about the potential for releases from the Kettleman Hills hazardous waste facility. First, EPA requested a comprehensive sampling and analytical study, including a risk assessment, of the possible off-site impacts that the PCB disposal operations at the Chemical Waste Management Facility may present to human health or the environment, and that study was completed, with extensive EPA oversight. In addition, the State of California recently completed studies on reports of increased birth defect incidences and potential environmental exposure sources within Kettleman City. The California Department of Public Health (CDPH) analyzed birth records and interviewed mothers who agreed to participate. The California Environmental Protection Agency (Cal/EPA) also conducted testing of air, water and soil gas in Kettleman City. Further, on February 8, 2010, EPA Region 9 began an extensive Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) investigation of the Chemical Waste Management (CWM) Kettleman Hills facility. The TSCA investigation discovered non-compliance with PCB requirements, including PCB releases at the facility. CWM cleaned up those PCB releases under a cleanup plan approved by EPA and the State of California, Department of Toxic Substances Control (DTSC).

EPA and the State of California have also recently taken action to address drinking water concerns in the area. On March 25, 2011, EPA issued an administrative compliance order under the federal Safe Drinking Water Act to the City of Avenal to address the City's violation of the Safe Drinking Water Act Disinfectants and Disinfection By-Products Rule. In addition, in January 2009, the State of California issued a compliance order to the Kettleman City

Community Services District to address its violations of the California Safe Drinking Water Act's maximum contaminant level for arsenic.

With respect to PM_{2.5} and ozone levels in the San Joaquin Valley, EPA, the State of California and the District are working diligently through an air quality planning process under the CAA to address these nonattainment pollutants. Members of the public have had, and will continue to have, the opportunity to provide input at several stages of this process. These agencies are working to ensure that there is a comprehensive plan with adequate controls for attaining the annual and 65 µg/m³ 24-hour PM_{2.5} ambient air quality standards. EPA's proposed action on the California Air Resources Board's (ARB) 2008 plan for attaining the PM_{2.5} standards in the San Joaquin Valley was published on November 30, 2010 (see 75 FR 74,518), and California has recently adopted revisions to the plan to address concerns identified by EPA and require additional reductions of air pollutants that adversely affect public health. EPA expects to re-propose action on the plan seeking additional public comment in the near future, before taking final action on the plan by September 30, 2011. EPA will also be working closely with both agencies as they develop a plan to meet the 35 µg/m³ 24-hour standard, which the State must submit to EPA by December 2012, following reasonable notice and public hearings. In addition, EPA is working with ARB and the District to ensure that there is a comprehensive plan with adequate controls for attaining the 1997 8-hour ozone air quality standard by the CAA's deadline of 2024. To that end, later this year, EPA intends to propose action on ARB's 2007 plan for attaining the 1997 8-hour ozone NAAQS in the San Joaquin Valley and to request public comment before taking final action on that plan by December 15, 2011. We note that both the 2008 PM_{2.5} plan and the 2007 ozone plan were subject to State/local public participation procedures and public hearings prior to adoption and submittal to EPA.

At the same time, a number of governmental bodies and others are providing significant funding for a wide variety of emissions reduction projects in the San Joaquin Valley that will contribute to substantial emissions reductions for PM_{2.5} and ozone in the Valley, among other pollutants. Through the Federal Highway Congestion Mitigation and Air Quality (CMAQ) program, Kings County is spending \$6,439,000 on projects in the years 2010-2014 to reduce emissions of air pollutants from vehicles throughout the county. Further, the West Coast Collaborative, a partnership between leaders from federal, state and local government, the private sector and environmental groups committed to reducing diesel emissions along the West Coast, has provided funding to the District, the Kern County Superintendent of Schools and Cal/EPA for a variety of diesel emission reductions projects throughout the San Joaquin Valley. Since 2008, EPA has provided over \$10,000,000 in Diesel Emissions Reductions Act funds to reduce diesel emissions throughout the Valley. We estimate that these funds result in approximately 130 tons of PM and 7 tons of NO_x reductions annually, affecting over 250 diesel engines throughout the Valley.

The provisions in the CAA and EPA regulations do not expressly contemplate that a PSD permit will contain conditions addressing air pollutants for which an area is in nonattainment. EPA interprets the Act and court precedents to establish those emissions of nonattainment pollutants (and their precursors) from the Project should be directly addressed in the NNSR permits that are issued in this instance by the District. Nevertheless, EPA has considered in the context of our environmental justice analysis for this permit the nonattainment conditions in the local area and

strategies in place to achieve attainment with the PM_{2.5} and ozone NAAQS in the San Joaquin Valley. But given the existing framework in which the commenters' concerns regarding nonattainment pollutants are being addressed, EPA has determined that it is not appropriate to address these issues further in the context of this PSD permitting action.

Nitrogen dioxide (NO₂) concentrations in the region are projected to decrease as a result of State and federal mobile source engine and fuel standards already in effect and being phased in as new vehicles replace older ones. Emissions from mobile sources account by far for the majority of NO_x emissions in Kings County. Emissions inventory data from ARB indicate that mobile source emissions in 2010 resulted in 25.2 tons per day of NO_x as compared with 2.2 tons per day for all stationary sources combined (the total inventory for 2010, including area sources, was 27.8 tons per day). In comparison, emissions of NO_x from the Project authorized by this permit are limited to 0.395 tons per day. The emissions inventory for 2020 projects that emissions from mobile sources will be 14.7 tons per day as compared with all stationary sources combined at 2.3 tons per day (with a total inventory of 17.3 tons per day). The maximum modeled impact that the Project will have on annual average NO₂ concentrations is 0.5 µg/m³, less than 1 percent of the NAAQS of 100 µg/m³.²

EPA does not believe that the available data provide sufficient information to determine whether the project's emissions would result in an exceedance of the 1-hour NO₂ NAAQS. EPA believes it is appropriate for us to consider the best available data that are germane in analyzing whether there may be disproportionate adverse impacts on minority communities and low-income communities. Executive Order 12898 recognizes agency discretion and provides for its provisions to be implemented as permitted by existing law, here the CAA, which does not preclude EPA from approving this PSD permit in the face of uncertainty concerning the impacts of short-term NO₂ emissions associated with the Project on the community. However, as noted above, EPA's judgment is that emissions from this source are unlikely to add significant environmental harm to the local communities.

When what is known about the air quality impact of this source is placed in context with mobile source emissions and other sources of air pollutants in the area and balanced against the amount of time EPA's review has extended beyond the deadline by which we were required to issue this decision under the CAA, EPA believes it reasonable to issue this permit without requiring a demonstration that the Project will not cause an exceedance of the 1-hour NO₂ NAAQS. This action is appropriate here to reconcile the tension that exists between provisions of the CAA in this particular instance where we have failed to complete our review of this application within one year of completeness and new requirements have become applicable after that time period. EPA has previously grandfathered pending PSD permit applications where imposing new PSD requirements could delay construction and frustrate economic development and our judgment was that the grandfathered projects would have a relatively minor effect on air quality.

To address the uncertainty that remains about air quality conditions, EPA intends to place an ambient NO₂ monitor in an appropriate location in the vicinity of the proposed source to gather

² The annual NO₂ NAAQS is formally expressed in units of parts per million (ppm), with a specified level of 0.053 ppm, for which the equivalent level in units of micrograms per cubic meter (µg/m³) is 100 µg/m³. Microgram per cubic meter units are commonly used in air quality modeling.

more information about the local NO₂ concentrations. This monitor, along with other NO₂ monitors that exist or may be sited in the District, will be used by ARB, the District and EPA to inform community residents about levels of that pollutant in the ambient air, to determine whether air quality in the region meets or exceeds the NAAQS for NO₂, and will inform governmental plans to address any identified concerns. Any such plans would consider all contributing sources in the airshed, including the Project, in the effort to address any identified nonattainment challenges. Having additional NO₂ monitoring data from this area will better inform future permitting decisions, and help to ensure that any additional measures necessary to reduce NO_x emissions and improve air quality and public health are put in place.

Although the PSD program is based on the goals of preventing air pollution and installing controls when new sources are being constructed, another purpose of the PSD program is to “insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.” Furthermore, there is also evidence of Congressional intent to avoid a moratorium on construction and delays in permit processing.

An initial effort by the applicant and EPA to assess the impact of this source on 1-hour NO₂ NAAQS has been inconclusive and added one additional year to the time it has taken for EPA to process this permit application. At the time EPA initially requested that APC address this requirement in May 2010, EPA was already more than one year overdue in completing action on the permit application, but we did not expect that it would take significant additional time for APC to complete a satisfactory analysis of its impact on 1-hour NO₂ concentrations. However, EPA and APC then spent the next 9 months preparing and reviewing information. The refined nature of the analysis required that APC take more time to prepare its submissions and EPA staff more time to review these submissions than EPA first expected. This delay has extended EPA’s review of this application beyond the effective date of the 1-hour SO₂ NAAQS and the date greenhouse gases (GHG) became subject to regulation. These requirements would not have otherwise applied had EPA taken action on this permit application sooner. In the face of the potential need to consume additional time to conduct further review of APC’s analysis of 1-hour NO₂ concentrations and to prepare a BACT analysis for GHG, EPA has concluded that grandfathering this application from these three requirements is a more equitable approach to avoid further delays in completing action on this permit in contravention of Congressional intent. EPA maintains our view that the grandfathering of this particular permit from the identified requirements is justified by the combination of the five factors described in the Supplemental Statement of Basis (Supplemental SB) and provides additional explanation below for why the combination of these factors and other considerations support grandfathering in this instance. These factors include: (1) the facility that APC proposes to construct will be a well-controlled facility that will apply BACT for NO₂ and achieve the lowest levels of air pollutant emissions achievable in this instance; (2) APC’s permit application was deemed complete by EPA more than a year before, and EPA had issued a proposed permit for the project before, the date on which EPA proposed the hourly NO₂ NAAQS; (3) unanticipated delays with the preparation and review of sufficient information to predict the impact of proposed sources on hourly NO₂ concentrations; (4) the delays encountered in supplementing the APC permit application to address the hourly NO₂ NAAQS caused EPA’s review of this application to extend beyond the dates when the hourly SO₂ NAAQS and greenhouse gas requirements became applicable to PSD permit applications; and (5) court decisions recognize an exception, in cases of significant delay

by the administrative agency, to the general rule that an administrative agency should apply the law in effect at the time it issues a permit or license.

EPA has expressed the intent to extend the same treatment to other permit applications that are similarly situated. However, the proposed approach of grandfathering the permit for the Project in particular is the result of EPA's responsibility to balance the statutory obligations to issue decisions on permit applications in a timely manner and to implement the substantive requirements of the Act. While EPA has reached a conclusion on the proper balance in the particular case of APC, we have not yet determined where the proper balance falls for other permits, all or most of which will differ from the APC case in at least some aspects. Thus, this decision should not be viewed as establishing a general rule or precedent applicable to any other permit application.

Courts have recognized that problems may arise in a case that the administrative agency could not reasonably foresee and that such problems must be solved despite the absence of a relevant general rule. In such instances, regulatory agencies may proceed through case-by-case decision-making rather than establishing general rules and regulations. While EPA interprets the law to provide us discretion to grandfather a permit on a case-by-case basis, this is a unique and unforeseen circumstance. Thus, EPA does not intend or expect to make widespread use of this discretion. EPA is separately considering whether a rulemaking process or another mechanism may be a more appropriate means to develop a nationwide grandfathering policy for the 1-hour NO₂ NAAQS.

B. Summary of the Formal Public Participation Process

As stated in the preceding section, EPA proposed to issue a PSD permit to APC for the Project on June 16, 2009. The initial public comment period on the proposal (Proposed Permit)³ began June 16, 2009, and closed on October 15, 2009. Another public comment period specific to three issues for the proposal began on March 4, 2011 and closed on April 12, 2011. During this second public comment period EPA took comments on the following three issues: 1) EPA's proposal to approve APC's PSD permit application for the Project without requiring a demonstration that this source will not cause or contribute to a violation of the 1-hour NO₂ NAAQS, 2) EPA's proposal not to require this source to meet emissions limitations for GHG or to demonstrate that the proposed source will not cause or contribute to a violation of the NAAQS for 1-hour concentrations of SO₂ and 3) EPA's environmental justice analysis for our proposed PSD permit action for the Project.

The purpose of this document is to respond to every significant issue raised in the public comments received during the public comment periods and explain what changes have been made in the final permit (Final Permit) as a result of those comments.

For the 2009 and 2011 public comment periods, EPA announced the public comment period through public notices published in the Fresno Bee, Vida en El Valle, the Avenal Chimes and on Region 9's website. EPA also distributed the public notices to the necessary parties in

³ We note that EPA's permitting regulations at 40 CFR Part 124 refer to proposed permits as "draft permits." See 40 CFR 124.6.

that is still relevant for TSP sources. Given the nature of the stationary source in this case (i.e., a natural gas-fired power plant), it is unlikely that any of the PM emissions will be larger than PM₁₀ particles. Further, because PM₁₀ has more serious health impacts than TSP, and because there is a NAAQS for PM₁₀ whereas there is none for TSP, it is far more protective of public health in the PSD permitting context to assume that all of the PM emissions from the Project are in the form of PM₁₀ (recall that in this case PM_{2.5} emissions are handled separately under the nonattainment NSR permitting process). The passage from the AAQIR quoted by the commenter is an explicit statement of this assumption and it is in no way related to the use of PM₁₀ as a surrogate for PM_{2.5}. As a result, we disagree with the commenter that the permit is inadequate on the basis alleged.

Comments Submitted by Earthjustice

14. **Comment:** The commenter states that the CAA requires BACT for pollutants subject to regulation under the Act and that carbon dioxide (CO₂) is such a pollutant. The commenter notes that the permit record does not contain an analysis for CO₂ controls and states that the permit fails to address BACT for CO₂. According to the commenter, such an analysis should have considered such things as energy production alternatives that do not rely on fossil fuel combustion, hybrid technologies that could improve overall carbon efficiency of the power plant, co-generation, changes to the project design that would lower total carbon emissions, and opportunities to improve turbine efficiency. The commenter finally states that once EPA determines the efficiency that represents BACT, EPA must translate that performance into enforceable limits on CO₂ emissions. The commenter also states that EPA must revise the proposed permit to explain EPA's position on BACT for CO₂ so the public can comment on the control levels selected or EPA's rationale for refusing to impose such controls.

Response: EPA did not consider GHGs to be subject to regulation at the time it issued the Proposed Permit in June 2009. 75 FR 17004 (April 2, 2010). Although EPA has determined that GHGs became subject to regulation as of January 2, 2011, we are grandfathering the Project from the requirement for BACT for GHGs, as stated in our Supplemental SB and for the reasons given in our responses to comments 1-22 in Section II.B.1.

15. **Comment:** The commenter states that the proposed permit fails to fully analyze BACT for NO_x, CO, or PM₁₀. The commenter states that:
- EPA failed to provide a top-down BACT analysis (including a ranking of available technologies, among the other elements of such an analysis);
 - the analysis EPA did provide was incomplete as it did not consider two facilities (the Kleen Energy Systems facility in Connecticut, and the CPV Warren facility in Virginia) that were recently permitted with CO limits below 2.0 ppm;
 - EPA did not consider improvements in gas turbine efficiency to lower overall emissions;
 - EPA did not consider alternatives to duct burning; and
 - EPA did not consider actual emissions data from other sources as opposed to a simple review of permitted levels for other facilities.

B. Comments Submitted During the Second Public Comment Period (March 4, 2011 - April 12, 2011)

1. Written Comments

Comments Regarding EPA's Proposal to Grandfather the Project from 1-hour NO₂, 1-hour SO₂ and GHG Provisions

1. **Comment:** EPA received comments both opposing and supporting our proposal to grandfather the Avenal permit application from specific requirements.

Response: EPA continues to find it appropriate and equitable, under the particular circumstances present in this instance, not to require a demonstration (consistent with EPA modeling guidelines) that the proposed Project will not cause or contribute to a violation of the 1-hour NAAQS for NO₂ and SO₂ or a demonstration that the Project will be capable of meeting emissions limitations for GHG based on the BACT requirement. The responses that follow provide additional detail on the basis for this conclusion.

STATUTORY AUTHORITY TO GRANDFATHER PERMIT AND RELEVANT JUDICIAL DECISIONS

2. **Comment:** EPA received several comments addressing EPA's authority (or lack of authority) under the CAA to grandfather the Avenal permit application.

Several commenters stated that EPA may not grandfather the Avenal permit application by waiving the statutory requirements in sections 165(a)(3) and 165(a)(4) of the CAA, which require that a source will not cause or contribute to a violation of NAAQSs and will apply BACT for each pollutant subject to regulation. One of these commenters points to the language of CAA 165(a), which the commenter says defines applicability of PSD requirements based on when construction of a source commences, not when a permit application is deemed complete. Thus, the commenter believes the CAA provides no authority for EPA to require compliance only with requirements that applied at the time the permit application was deemed complete or upon the 1-year anniversary of such a completeness determination. This commenter also stated that when Congress adopted the PSD program, it understood that certain sources might get caught by changing permit requirements and it offered specific grandfathering relief to certain sources under section 168(b) of the Act. The commenter argues that this situation is governed by a Supreme Court precedent (*Andrus v. Glover Construction Co.*) which says that where Congress has provided an express grandfathering exemption and not others, additional exemptions are not to be implied in the absence of contrary legislative intent.

However, another commenter argues the opposing proposition that EPA lacks any statutory authority to apply requirements related to NAAQS or a pollutant subject to regulation where those requirements take effect after the 1-year period specified in section 165(c) of the CAA has expired. This commenter argues that EPA has no statutory authority to penalize a PSD permit applicant by imposing additional requirements that arise after EPA

has defaulted on our statutory duty to grant or deny a complete permit application within one year. Thus, according to this commenter, there is no conflict of the type EPA describes between requirements in the CAA to make a decision on a permit application within one year and to ensure that new and modified sources may only obtain a permit to construct after showing they can meet the substantive PSD permitting criteria. In addition, this commenter argues, based on section 161 of the CAA, that the Act does not authorize EPA to require a demonstration that a source will not cause a violation a particular NAAQS until the affected area is designated as attainment or unclassifiable.

Another commenter said that EPA properly concluded the PSD permit application should be grandfathered from demonstrating compliance with the 1-hour NO₂ standard. The commenter argues that nothing in the CAA or in EPA regulations allows the retroactive application of new requirements after a complete permit application has been submitted. The commenter claims such retroactive application would be inconsistent with CAA section 165(c) and it would potentially create a permitting process that could continue in perpetuity without resolution. The commenter further states that Congress added section 165(c) as part of the 1977 Amendments to the Act to address its concern that the PSD program could fall prey to unreasonable bureaucratic delays. The commenter further notes that EPA has previously exercised the discretion not to require pending permit applications to meet new permitting requirements.

Response: EPA does not agree with the interpretations of the CAA offered by these commenters, except to the extent that EPA agrees we have the discretion to grandfather pending permit applications from new requirements in appropriate circumstances. As noted in the Supplemental SB (page 5) and the April 1, 2010 memorandum from the Director of the Office of Air Quality Planning and Standards cited there, EPA has previously exercised this discretion to establish grandfathering provisions in regulations. Indeed, EPA has done so where provisions of the CAA contradict each other, citing the authority under section 301(a)(1) “to set transitional rules which accommodate reasonably the purpose and concerns behind the two contradictory provisions.” 45 FR 52676, 52683 (Aug. 7, 1980). Furthermore, EPA has noted and continues to recognize that even in the absence of a conflict between sections of the Act, “EPA would have the authority under section 301(a)(1) to exempt those projects in order to phase-in new requirements on a reasonable schedule.” *Id.* at 52683 n. 5.

EPA believes that there is a conflict or tension between provisions of the CAA that EPA must reconcile in this situation where the Agency has failed to complete action on a complete permit application within one year and new requirements have become applicable after that time period. We do not agree with the commenters’ arguments to the contrary. The CAA does not provide clear direction concerning how EPA should apply sections 165(a)(3) and 165(a)(4) of the Act to NAAQSs that become effective or pollutants that become subject to regulation after the 1-year time period has run on a particular application. As one court has observed, the CAA does not specify a consequence for failure to comply with the one-year deadline in section 165(c). *Hancock County v. EPA*, 1984 U.S. App. Lexis 14024, 22 ERC 1714 (6th Cir. 1984). The fact that commenters have offered opposing arguments that Congressional intent is clear helps to illustrate that the Act is

ambiguous on this question. Since Congress has not precisely spoken to this issue, EPA has the discretion to apply a permissible interpretation of the Act that balances the requirements in the Act to make a decision on a permit application within one year and to ensure that new and modified sources will only be authorized to construct after showing they can meet the substantive permitting criteria. *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843-44 (1984).

EPA has not proposed to waive the statutory requirements in section 165(a)(3) and 165(a)(4) in the case, as some commenters assert. The issue presented by the Avenal permit application is which NAAQS and which pollutants are covered by these applicable provisions of the Act when applied to a permit application that was determined complete before the effective date of particular NAAQS and the date when a particular pollutant becomes subject to regulation under the CAA. No one has disputed that section 165(a)(3) applies to all NAAQS in effect at the time Avenal's permit application was determined complete, and EPA is not exempting this permit application from the requirements of section 165(a)(3) with respect to all such NAAQS. Likewise, no one disputes that the BACT requirement in section 165(a)(4) applies to each pollutant subject to regulation at the time Avenal's permit application was complete. The issue is thus how EPA should interpret and apply these sections of the Act in the situation presented here considering the requirement of section 165(c) of the Act that EPA make a decision on a permit application within one year of the date the application was determined complete. This is not a question of whether sections 165(a)(3) and 165(a)(4) apply; it is a question of which NAAQS and which pollutants these provisions cover when EPA has not completed our review of an application in a timely manner and additional NAAQS have become effective and additional pollutants have become subject to regulation.

EPA agrees that as a general rule, sections 165(a)(3) and 165(a)(4) apply to "any NAAQS" that is effective and "each pollutant" that is subject to regulation as of the date a final PSD permit is initially issued (before any administrative appeal proceeding commences). However, these provisions cannot be read in isolation and should be construed in the context of other provisions in section 165 of the Act, such as section 165(c). Since EPA is required to give effect to all provisions of the Act, in those circumstances where a strict reading of sections 165(a)(3) would frustrate Congressional intent that EPA act in a timely manner, the Agency has the discretion to interpret the reach of section 165(a)(3) to be limited to particular NAAQS that were proposed or effective prior to specific milestones in the permitting process. The same reasoning may apply to particular pollutants that become subject to regulation and hence subject to section 165(a)(4) of the Act while an application is pending.

Thus, EPA does not agree with the view expressed by some commenters that section 165(a)(3) and 165(a)(4) must be read strictly in all circumstances to apply to all NAAQS in effect and all pollutants subject to regulation on the date EPA issues a final permit decision, regardless of other circumstances or other requirements of the CAA. Such a reading fails to acknowledge or give meaning to section 165(c) of the Act. As one commenter has pointed out, legislative history illustrates Congressional intent to avoid delays in permit processing. S.Rep. No. 94-717, at 26 (1976) ("nothing could be more detrimental to the intent of this

section and the integrity of this Act than to have the process encumbered by bureaucratic delay”).

Furthermore, EPA is not persuaded that the first clause in section 165(a) of the Act requires that EPA base applicability of PSD requirements on the date when construction of a source commences. Read together with the first clause in section 165(a)(1), it is apparent that section 165(a) establishes only that construction may not commence without a permit issued “in accordance with the requirements of this part.” This language does not define “the requirements of this part” that are applicable when a permit is issued or establish that the applicable requirements under the PSD program are those in effect when construction commences, rather than those applicable when the permit is issued. This interpretation of the Act as requiring compliance with standards in effect when construction commences is inconsistent with the view expressed by this same commenter, based on *Ziffrin v. United States*, 318 U.S. 73, 78 (1943), that courts have consistently recognized that an agency is required to apply the law in effect at the time it renders a decision on a permit application.

EPA is not persuaded that the presence of a grandfathering provision in section 168(b) precludes EPA from establishing grandfathering exemptions in other circumstances. The commenter’s reference to the Supreme Court’s observation that when “Congress expressly enumerates certain exceptions to a general prohibition, additional exceptions are not to be implied in the absence of evidence of a contrary legislative intent,” *Andrus v. Glover Construction*, 446 U.S. 608, 616-17 (1980), is not persuasive here. The court applied this principle in a circumstance where there was a provision of law “expressly relating to contracts of the sort at issue here.” *Id.* These are not the circumstances here. Section 168(b) of the Act does not expressly relate to the application of PSD permitting requirements to an application pending at the time of the promulgation of a new NAAQS or the regulation of an additional pollutant under the CAA. Section 168(b) exempted facilities that were subject to permitting requirements under an earlier version of the PSD program created solely by EPA regulation prior to the enactment of section 165 of the CAA and other provisions that expressly authorized and established the requirements of the PSD permitting program applicable today to Avenal and other sources. This exemption operated to continue existing requirements for certain sources after a fundamental change in the statutory and regulatory regime under which such sources were required to obtain authorization to construct or modify major stationary sources of air pollutants. Such an exemption does not expressly relate to the incorporation of a new requirement into the PSD program, under existing statutory authority, when EPA promulgates a regulation that creates such a requirement. In this case, EPA is not grandfathering the APC permit application from the general prohibition in section 165(a) against commencing construction in the absence of a permit issued “in accordance with the requirements of this part.” The CAA does not contain any express exemptions to the phrase “the requirements of this part” or from section 165(a)(3) of the Act or section 165(a)(4) of the Act that apply when EPA promulgates an additional NAAQS or additional pollutant becomes subject to regulation. Furthermore, section 168(b) applied to sources that had commenced construction before new provisions of the CAA were enacted, whereas the grandfathering that EPA is applying in this instance is applicable to changes in regulatory requirements prior to the issuance of a permit. Thus, the adoption of a one-time grandfather provision upon enactment of the statutory PSD program is clearly

different from grandfathering when EPA promulgates a new NAAQS or regulates a new pollutant, which the Act does not address. The fact that Congress expressly enumerated an exemption in section 168 intended to ease transition upon enactment of the PSD provisions in the Act does not constrain the Agency with respect to offering reasonable transitional exemptions provisions when EPA regulations create new PSD program requirements under those statutory provisions.

Likewise, EPA does not agree that the Act clearly prohibits EPA from requiring PSD permit applicants to meet new requirements that take effect after the first anniversary of the date of filing of a completed application. The statute does not expressly bar applying new requirements after one year has passed and is ambiguous with respect to the necessary remedy in this circumstance. The CAA provides that “[a]ny completed permit...shall be granted or denied not later than one year after the date of filing” of a complete PSD permit application. The Act does not specify a consequence for failure to comply with this 1-year deadline in section 165(c). *Hancock County v. EPA*, 1984 U.S. App. Lexis 14024, 22 ERC 1714 (6th Cir. 1984). While there may be circumstances where it may appear unfair to subject a permit applicant to a new requirement that would not apply had the Agency met our mandatory duty, it does not necessarily follow that the terms of the Act compel fair treatment to permit applicants in such circumstances. EPA retains the discretion to deny a permit application within one year should the applicant fail to demonstrate compliance with all applicable PSD requirements within that period. This would require the applicant to reapply after new requirements become effective, thus achieving the same outcome that this commenter argues is prohibited by the Act when EPA fails to make any decision within one year. It does not follow that an applicant should be affected by a new requirement when EPA fulfills our mandatory duty on time while an applicant is relieved of this same requirement when EPA does not.

While one can infer that EPA should be precluded from applying new requirements that take effect after the 1-year period has run in order to achieve an equitable outcome, this is not the only inference that one may draw from the context of the Act. Another inference that can be drawn is that Congress expected EPA, in these circumstances, to strike a balance between the dual Congressional goals of timeliness and protecting air quality from construction or modification of major sources after promulgation of additional NAAQS to protect public health and welfare. Absent clear language requiring a particular remedy in these circumstances, EPA retains the discretion to adopt transitional exemptions to achieve fair and equitable results for all parties. The interests of communities affected by the pollution from a new or modified source merit consideration as well as the interests of the permit applicant. As discussed further below, EPA believes the balance of interests may shift depending on the amount of time that an application remains pending beyond the 1-year deadlines and other factors.

EPA also disagrees with the argument that PSD requirements should not apply to the 1-hour NO₂ NAAQS until the area in which a source proposes to locate and other areas of the country have been designated as attainment or unclassifiable for this particular NAAQS. Section 161 of the CAA requires that states prevent significant deterioration of air quality “in each region (or portion thereof) designated pursuant to section 107 as attainment or

unclassifiable.” The provision does not explicitly require that an area be attainment or unclassifiable for a particular NAAQS or pollutant before the NAAQS or pollutant is covered by the provisions of the PSD program. The express terms of section 165(a)(3) and 165(a)(4) apply to “any NAAQS” and “each pollutant subject to regulation.” EPA has a longstanding interpretation that the CAA requires applying the PSD requirements in accordance with section 161 of the CAA in any area that is formally designated by the state as either “attainment” or “unclassifiable” for any pollutant for which a NAAQS exists. However, an otherwise eligible source is exempt from PSD review, with respect to a particular pollutant, if the area in which the source would locate is designated “nonattainment” for that pollutant. 45 FR 52676, 52677 (August 7, 1980). The reasoning provided in prior EPA actions remains valid and applicable in this particular permitting action. 75 FR 31514, 31560 (Jun. 3, 2010) (and response to comments document); EPA, Director of EPA’s Office of Air Quality Planning and Standards, *Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards* (April 1, 2010) (and references cited therein).

EPA does not agree that we are compelled to grandfather this permit application because regulations may not be construed to have retroactive effect absent express statutory authority. The application of new regulations to a pending permit application does not implicate questions of retroactive rulemaking. A retroactive requirement is one that “takes away or impairs vested rights acquired under existing laws, or creates a new obligation, imposes a new duty, or attaches a new disability in respect to transactions or considerations already past.” *Landsgraf v. USI Film Products*, 511 U.S. 244, 269 (1994). Where new regulations take effect prior to a decision to grant or deny a permit application, the application of such regulations to a decision on such an application is prospective rather than retroactive. Retroactive effect does not occur where an agency applies current requirements to a decision to issue a permit for future operations (rather than the law in effect at the time of filing a permit application). *Kaiser Aluminum & Chemical Corp. v. Bonjorno*, 494 U.S. 827, 847-48; 110 S.Ct. 1570, 1582 (1990) (Scalia, J. concurring); see also, *Fassilis v. Esperdy*, 301 F.2d 429, 432 (2d Cir. 1962). Agency action that upsets expectations based on prior law is not retroactive. *National Cable & Telecommunications Ass’n v. FCC*, 567 F.3d 659, 670-71 (D.C. Cir. 2009).

3. **Comment:** One commenter claims that EPA’s proposed interpretation of the Act is inconsistent with the purposes of the PSD program that are expressly outlined in section 160 of the Act, and with the policy choices that Congress made in adopting the PSD program. The commenter states that EPA’s decision to grandfather the Avenal Project cannot be reconciled with any of the stated purposes of the PSD program and that there is nothing in the Act which suggests that Congress intended for those purposes to be waived or trumped by considerations that elevate procedure over substance. The commenter says EPA previously rejected similar requests for grandfathering based on these purposes of the PSD program (citing 45 FR 52676, 52683 (Aug. 7, 1980)).

The commenter further states that EPA’s proposed approach here undermines the policy choices made by Congress in adopting the PSD program that 1) it is preferable to prevent air pollution from becoming a problem in the first place, and 2) controls should be installed

when new sources are being constructed rather than as retrofits on existing sources. The commenter claims the lack of a demonstration that Avenal will not cause or contribute to a violation of the 1-hour NO₂ standard would defeat the first goal as it would undermine the “prevention” purpose of the PSD program. The commenter also claims that in the absence of modeling to show compliance with the NAAQS, the possibility of violations and the future need for reasonably available control technology requirements on existing major sources is inconsistent with the second goal.

Response: EPA agrees the PSD program is based on the goals of preventing air pollution and installing controls when new sources are being constructed, but Section 160(3) of the Act also states that a purpose of the PSD program is to “insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.” EPA continues to construe this provision to call for a balancing of economic growth and protection of air quality. *See*, 70 FR 59582, 59587-88 (Oct. 12, 2005).

Legislative history illustrates Congressional intent to avoid a moratorium on construction and delays in permit processing. The House Committee report describes how “the committee went to extraordinary lengths to assure that this legislation and the time needed to develop and implement regulations would not cause current construction to be halted or clamp even a temporary moratorium on planned industrial and economic development.” H.R. Rep. No. 95-294, 95th Cong., 1st Sess., at 171 (1977). As an illustration of the lengths to which the committee went, the report lists five elements of the legislation, including the following statement: “to prevent disruption of present or planned sources, the committee has authorized extensive ‘grandfathering’ of both existing and planned sources.” *Id.* Furthermore, as one commenter has noted, the Senate Committee report specifically discusses concerns about delays in program implementation. S.Rep. No. 94-717, at 26 (1976) (“nothing could be more detrimental to the intent of this section and the integrity of this Act than to have the process encumbered by bureaucratic delay”).

As in the case of the Avenal permit, in the 1980 regulation cited by commenters, EPA sought to strike a balance between competing goals of the CAA. 45 FR 52683. EPA explained that delaying certain construction “by imposing new PSD requirements could frustrate economic development” and noted that the grandfathered projects “have a relatively minor effect on air quality.” *Id.* As a result, EPA adopted a grandfathering provision that “would strike a rough balance between the benefits and costs of applying PSD to those projects.” *Id.* Although EPA used issuance of permits previously required under the SIP in that case to determine eligibility for grandfathering, this precedent does not preclude EPA from using another milestone in the permit process to determine eligibility to strike the appropriate balance in a different situation. In 1980, EPA concluded that determining eligibility for grandfathering based on a complete application might “exempt many more projects from review” in one particular situation addressed in 1980 and that this “would fail to give adequate expression to the interests behind section 165, especially the goal of protecting air quality.” *Id.* This precedent does not preclude EPA from using the date of a complete application in another circumstance where such a date would not exempt a large number of projects or have an adverse impact on air quality. The interests behind section 165 include both protection of air quality and timely decisionmaking on pending permit applications. As discussed in the SB, EPA is seeking

here to give effect to balance the requirements in the Act to make a decision on a permit application within one year and to ensure that new and modified sources will only be authorized to construct after showing they can meet the substantive permitting criteria.

4. **Comment:** One commenter argues that a Supreme Court decision (*General Motors Corp v. United States*) previously rejected EPA's reasoning that we must reconcile the statutory obligations to issue a permit within one year and to ensure that the permitting requirements of section 165 are fulfilled. The commenter says that the court held in this case that a delay on EPA's part does not affect the ability or obligation of EPA to enforce other requirements of the Act. According to the commenter, the Supreme Court's conclusion in the General Motors case was based in part on the presence of other statutory remedies for delay by EPA. Since such a remedy is available under section 304(a)(2) of the CAA, this does not entitle a permit applicant to cut off its obligation to comply with the CAA.

Response: We note first that *General Motors Corp v. United States*, 496 U.S. 530, 540-41 (1990), concerned enforcement of a SIP, not issuance of a permit. That is a key difference. In *General Motors Corp. v. United States*, the Supreme Court held that enforcement of an existing state implementation plan is not barred by EPA's unreasonable delay in acting on a proposed revision of the SIP. The situation presented in the case of the Avenal permit application is distinguishable. The question presented by the Avenal permit application is whether EPA should apply the law in effect at the time the Agency reaches a final decision to grant or deny the application or the law in effect at an earlier time due to EPA's failure to reach this decision in a timely manner. In the case of the Avenal permit application, additional legal requirements have taken effect while the Agency was reviewing the application and such requirements would clearly not have applied to this application had EPA completed our review within the 1-year period of time established in the Act. Thus, the question presented for EPA in the Avenal situation is whether EPA's failure to complete action within the statutory time frame bars the Agency from applying the new legal requirements to the Avenal permit application. In *General Motors*, the court addressed a different question, which was whether the Agency's delay in approving a change in law (a revision of a SIP) barred the Agency from applying the previously applicable law (the earlier version of the SIP). EPA does not contend in this instance that our delay justifies declining to apply the permitting requirements in effect at an earlier time. EPA is still requiring Avenal to obtain a PSD permit, and has not suggested that our delay justifies declining to enforce any requirement to obtain a permit. Indeed, since EPA is seeking to apply the law in effect prior to the time of our delay, the holding in *General Motors* is in fact consistent with EPA's view in this instance.

5. **Comment:** Several commenters believe EPA must apply the applicable standards in effect at the time the permit is issued. Citing prior court decisions (*Ziffrin v. United States*, *State of Alabama v. EPA*) and opinions of the EAB (*In Re Dominion Energy Brayton Point*, *In re Phelps Dodge Corp.*), one commenter states that the courts have consistently recognized that an agency is required to apply the law in effect at the time it renders a decision on a permit application. The commenters state that regardless of whether a permitting authority meets its obligation to grant or deny a permit application within the time period specified in the CAA, the permit must comply with all applicable standards in

effect at the time the permit is issued and that EPA cannot use our failure to make a timely permit decision in this case to justify exempting the Project from substantive applicable standards that protect public health. Other commenters cite additional EAB decisions (*In Re Vulcan Construction Materials* and *In re Shell Gulf of Mexico, Inc. & Shell Offshore, Inc.*).

Response: EPA agrees that as a general rule, an agency is required to apply the law in effect at the time it reaches a decision on a permit application. In the Supplemental SB, EPA explained that we have previously relied on the judicial opinions cited by commenters to support the general principle that a decision on an application for a government license, permit, or other type of authorization must be based on the law in effect at the time of the decision of the reviewing authority. *See Ziffrin, Inc. v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1108 (5th Cir. 1977). However, EPA went on to explain how some courts have also recognized an exception to this principle in circumstances where there has been a significant and prejudicial delay by the government agency reviewing an application. For reasons discussed in our response above, EPA continues believe the circumstances present in this instance fit within an exception to this general rule recognized by the courts and that EPA's proposed action to grandfather this permit application is not precluded by the judicial decisions cited by commenters. Furthermore, the EAB's orders in the *Shell* and the *Vulcan Materials* appeals recognize that "EPA has the authority to lawfully exercise, through an appropriate process, whatever discretion EPA has to interpret what 'all applicable standards' means with the respect to a particular source being permit." *In re: Vulcan Construction Materials, LP*, PSD Appeal No. 10-11, Slip. Op. at 39 n. 41 (Mar. 2, 2011) (internal quotations omitted).

6. **Comment:** One commenter notes that in response to the deadline litigation brought forth by Avenal, EPA argued the opposite of what we are now proposing – that the case law says EPA must apply the law in effect at the time the Region makes a decision on a permit, rather than the law in effect at the time the permit application is deemed complete.

Response: EPA continues to agree that, as general rule, the issuance of a PSD permit must be based on the law in effect at the time of such action. However, as EPA explained in the Supplemental SB, the Agency is refining our interpretation to recognize an exception to this general principle in a case where application of new requirements may result in a significant delay in issuance a decision on a PSD permit application that is pending when new requirements become effective. EPA has informed the court that we no longer assert that we must apply each NAAQS in effect at the time we make a final decision on Avenal's permit application.

7. **Comment:** The commenters claim that in the absence of statutory authority, EPA has attempted to create "equitable" authority for our grandfathering proposal and that can only be exercised by a court. Multiple commenters state that EPA has misapplied *Mitchell v. Overman* because that case speaks only to the powers of the judicial branch and administrative agencies do not have the same inherent equitable powers as the courts, and because there has been no court action here except to ensure EPA makes a final permit decision in a timely manner. The commenters criticize EPA's reliance on *Application of*

Martini and *Fassilis v. Esperdy* as the basis for our proposition that *Mitchell* might be applicable to an administrative agency. According to the commenters reliance on those cases is misplaced and incorrect because they do not speak to the power of an agency to fashion and administer its own remedy, nor do they permit the agency to violate any statutory mandates. Further, a commenter states that even if EPA did possess powers available only to the judiciary, the Agency's decision in this case cannot be reconciled against the clear Congressional intent that sources must apply best available controls for all regulated pollutants and demonstrate they will not cause or contribute to the violation of any NAAQS.

Response: EPA's grandfathering action is not based on assertion of equitable power to disregard or override law, but rather on an interpretation of our statutory authority. In so doing, EPA has in this case determined which regulatory requirements (regulations) are covered by the statutory requirements that apply to an application that was pending when the regulatory requirement was established and an application that EPA has failed to grant or deny within the 1-year time period set forth in the statute. EPA does not dispute that administrative agencies only have the powers conferred by statute. However, EPA may interpret the statutory requirements consistent with Congressional intent and exercise its discretion in a thoughtful way in doing so. Thus, while an administrative agency in the executive branch does not have the equitable powers of a court, this does not necessarily mean an administrative agency cannot interpret its statutory authority to achieve equitable outcomes consistent with Congressional intent.

The court's holding in the *Martini* case was not solely based on the equitable powers of the court. In that decision, the court held that an individual was entitled to have his petition for naturalization granted under the expired law because of the government's delay in the approval of his application. *Application of Martini*, 184 F.Supp. 395, 401-402 (S.D.N.Y. 1960). The court observed that "[t]he unexplained administrative delay following Martini's filing if given controlling weight *would frustrate Public Law 114*." 184 F.Supp. at 401 (emphasis add). This indicates the court was concerned that Congressional intent would be frustrated if the applicant were denied the benefit of Public Law 114 by virtue of the inaction of the administrative agency. Thus, the court extended the principle of "the act of the court shall prejudice no man" to the act of an administrative agency (not just the act of the court) in order to effectuate Congressional intent with respect to individuals like Martini who applied for naturalization "within the original time limited by the statute." *Id.* at 400.

Likewise, in *Fassilis*, the court also focused on Congressional intent. Here, the Second Circuit upheld several denials of applications for permanent residency status based in part on a change in law that occurred during administrative appeals of the denials. *Fassilis v. Esperdy*, 301 F.2d 429, 434 (2d Cir. 1962). This result was based on the court's conclusion that there were "no substantial delays on the part of the administrative agency which operated to deprive the applicants of any right to which any of them was entitled." *Id.* Although noting that it was not determinative of the result, the court also found significance in the fact that Congress did not enact a savings clause to protect pending administrative proceedings. 301 F.2d 433. The court concluded in that case that

Congressional intent was clear that the change in law should apply to pending applications and it was not faced with “a question of policy or of judgment committed by Congress to the expertise and decision of administrative tribunals.” *Id.* at 434. However, in *Fassilis*, the Second Circuit was not faced with a provision that established a mandatory duty for the Immigration and Naturalization Service to Act on the pending applications within a specific period of time. The court’s conclusion in that case that Congressional intent was clear was based on the language in the relevant law and the absence of a savings clause does not mean that EPA cannot weigh Congressional intent differently where it has a mandatory duty to act in a timely manner on PSD permit application.

Thus, EPA continues to believe that the court precedents in *Martini* and *Fassilis* support grandfathering under the circumstances presented here for the Avenal permit application. EPA is not relying directly on *Mitchell v. Overman* to establish that it has the equitable powers of a court. Rather, EPA is relying on the subsequent reasoning in *Martini* that extended the principal of “the act of the court shall prejudice no man” to administrative agencies when necessary to effectuate Congressional intent. *Fassilis* did not question this reasoning, but made clear that the Second Circuit would not apply it where (1) Congressional intent is clear that a change in law attaches to a pending application and (2) there is no prejudicial delay in an administrative proceeding.

Congress’ intent to require BACT for all regulated pollutants and to require sources to show they will not cause or contribute to a violation of a NAAQS is not so clear as to direct how EPA should apply these requirements in a case such as this where EPA has exceeded the statutory deadline in the Act by more than two years. Congress clearly established a mandatory duty for EPA to act on a PSD permit application within one year. But Congress did not address how EPA should reconcile this duty with a situation such as this where the Agency’s delay leads to the potential application of a series of new requirements to the permit application.

In the case of the Avenal permit application, Congressional intent for timely action would be frustrated if EPA did not take action to grandfather this permit application. Avenal’s and EPA’s effort to assess compliance with the hour NO₂ NAAQS has at this point added one additional year to the time it has taken for EPA to process this permit application. This delay has extended EPA’s review of this application beyond the effective date of the 1-hour NO₂ concentration and the date GHG became subject to regulation. This delay has now swept in two additional requirements (for GHG and SO₂) that would not have applied had the NO₂ analysis been completed sooner. In the face of the potential need to consume additional time to obtain better information on 1-hour NO₂ concentrations and to prepare a BACT analysis for GHG and the absence of information to suggest this source will have a major impact on air quality (discussed elsewhere in this response to comment document), Congressional intent is best fulfilled in this instance by relieving Avenal of the need to demonstrate compliance with additional requirements that have become applicable only as a result of EPA’s delay.

8. **Comment:** With respect to EPA’s application of *Martini* and *Fassilis*, one commenter states that although EPA has attempted to create an equitable test which would allow the

Agency to grandfather a source from CAA requirements in some circumstances, EPA never shows that the facts in this particular case support the application of such a test. First, the commenter states the Supplemental SB never established that there were substantial delays on the part of the administrative agency (in this case EPA) as was the case in *Fassilis*. In particular, the commenter points to declarations made by EPA as part of the deadline litigation, that the commenter says show the bulk of the delay was the result of the section 7 consultation under the ESA. Other commenters argue that EPA's reasoning fails to recognize that the required ESA consultation was not completed until after both the NO₂ and SO₂ standards had already been adopted and after the GHG requirements had been proposed. One commenter asserts that because the delay which held the permit beyond the promulgation date of the 1-hour NO₂ NAAQS was not within the control of EPA, there is no basis for treating this case in the same way as the delay in *Martini*. Noting that the ESA consultation was not completed until August 9, 2010, the commenter says that delay alone was enough to push the permit application process beyond the 1-year mark EPA seeks to protect.

Response: Webster's dictionary provides two basic meanings of the term "delay." One is to put off, postpone. The other is to stop, detain or hinder for a time. Merriam-Webster's Collegiate Dictionary, at 304 (10th Edition, 2001). EPA intended to apply the second meaning the term "delay" in the Supplemental SB. It has taken a long time for EPA to take action on this application. EPA has used the term "delay" in this context simply to describe the passage of time, not to pass judgment on whether the time required was a reflection of EPA's or any other parties' failure to act diligently. EPA has acknowledged the amount of time that has passed despite our best efforts, and that this delay has exacerbated EPA's noncompliance with a mandatory duty.

Grandfathering a permit application to remedy the extended delay and eliminate an obstacle to EPA fulfilling our statutory duty is not inconsistent with EPA's position that we have acted with diligence and proceeded as quickly as we could under the circumstances. When a person is driving a car and gets caught in a traffic jam, he or she may be delayed, but that does not mean the delay is the fault of the driver. The delay that occurred in *Martini* is described in the court's opinion as an "unexplained administrative delay." 184 F.Supp. 395, 401 (S.D.N.Y. 1960). The court's reasoning did not depend on a determination of whether the delay was justified or not. As described by the Supreme Court, the power of a court to issue a judgment retrospectively in cases of delay applies where the delay has been caused by "the multiplicity or press of business" or the "intricacy of the questions involved." *Mitchell v. Overman*, 103 U.S. 62, 64-65 (1880). Under the reasoning of these cases, substantial delay justifies the type of grandfathering action EPA is taking in the case of this permit application, regardless of whether the cause of that delay is a backlog of work or challenging issues that required significant time and effort to overcome.

The reasoning of the judicial decisions that recognize it may be appropriate to apply legal requirements in effect at an earlier time when there has been a substantial delay by a government agency apply equally to any government agency or multiple agencies that are required to take steps to approve an applicant. The United States Fish and Wildlife Service

is a United States government agency. In this case, there has been a delay in this instance by the United States government, regardless of whether the cause of that delay is attributable to EPA or another agency. The permit applicant experiences the effects of delay regardless of which agency is responsible. Thus, EPA is not persuaded that grandfathering is not justified because another agency required significant time to fulfill its responsibilities under applicable requirements.

9. **Comment:** The commenters additionally argue that the permit applicant does not have a right to a PSD permit after the statutory 1-year period has passed and that such a delay does not entitle the applicant to cut off the obligation to comply with the statute. The commenters assert that if a permit application is inadequate to meet all applicable statutory requirements and EPA is compelled to act on the permit, then the permit must be denied. The commenters state that in this case EPA could have denied the permit for a number of reasons, including the fact that the formal consultation under the ESA had not concluded until well after the required 1-year period. One commenter additionally argues that EPA cannot claim the delay here operated to deprive the applicant of any right to which it was entitled as was the case in *Fasillis*. Again pointing to documents submitted by EPA in the deadline litigation, the commenter claims that we ourselves have recognized that Avenal has no right to comply with less protective air quality requirements based on the date of its permit application. Further, the commenter states that Avenal's ability to pursue a permit has not been denied in any way and that it is still free to submit the required demonstrations and attempt to show that the Project will comply with the requirements of the CAA. The commenter concludes that EPA cannot reasonably claim that the test in *Martini* has been met where no rights have been denied as a result of a delay.

Response: EPA agrees that a permit applicant does not obtain a right to a PSD permit after the one-year deadline the Act has passed, and that a failure to meet this deadline by EPA does not automatically cut off the obligation to comply with the CAA. EPA retains the discretion to deny a permit application if the Agency is compelled to Act on the permit on the basis of section 165(c) of the Act. However, EPA must have a reasoned basis to deny a permit application and base that decision on the applicable in section 165 of the Act and, in this case, section 52.21 of EPA's regulations.

The CAA establishes a mandatory duty for EPA to grant or deny a completed permit application within one-year. A permit applicant is thus entitled to a decision from EPA in this time frame, and EPA cannot deny a permit without grounds. In ordinary circumstances, such grounds clearly include failing to show a source will not cause a violation of the NAAQS or meet the BACT requirement for each pollutant subject to regulation. However, in the extraordinary circumstances present in the case of the Avenal permit application, denying this permit on the basis for the 1-hour NAAQS for NO₂ and SO₂ and the BACT requirement for GHG would frustrate Congressional intent.

Furthermore, the relationship between EPA's authority under the PSD provisions in the CAA and the Agency's obligations under the ESA when issuing a PSD permit is complex. Commenter has not demonstrated how EPA would have grounds to deny a PSD permit

unique circumstances (as occurred in the case of the Avenal permit) when EPA is unable to promulgate regulations in time or to crystallize general criteria. See the responses to comments 3, 5 and 11 in Section II.B.1. However, a determination of whether grandfathering is appropriate should be made on case-by-case basis when new requirements are incorporated into the PSD permitting regulations. EPA does not agree with the commenter's suggestion that one can always conclude that there would not be any environmental degradation in applying a transition policy as compared to immediately enforcing a newly promulgated NAAQS.

Comments Regarding Environmental Justice Issues

23. **Comment:**¹¹ The commenters state that environmental justice concerns justify rejection of the proposed permit. Even without a new power plant, the commenters say that the nearby communities of Avenal, Huron and Kettleman City are burdened by a number of environmental harms including: some of the highest ozone and PM_{2.5} levels in the country, drinking water contamination, exposure to pesticides and other agricultural chemicals, near roadway exposure to diesel particulate emissions from the I-5 freeway, defunct oil and gas extraction operations, risk associated with proximity to a hazardous waste facility, impacts associated with composting and the application of biosolids sludge from LA, immuno-compromised health associated with a spike in birth defects and a high number of miscarriages. The commenters state that these impacts contribute to higher-than-average asthma prevalence, and asthma-related hospitalizations and emergency room visits. Further noting high unemployment rates in these areas and a lack of access to healthcare, the commenters state that the residents of Avenal, Huron and Kettleman City do not have the resources to cope with the above factors, and that the NAAQS do not provide an adequate margin of safety to account for those factors. The commenters state that although EPA's EJ analysis acknowledges that many of the above factors in isolation increase vulnerability to the health effects of air pollution, EPA does not analyze these factors in combination. The commenters conclude that adding another major source of pollution in this area would make existing problems worse and would be the very definition of environmental injustice.

Response: EPA agrees that communities near the Project face a number of environmental concerns, including those identified by the commenters, and that those factors in some cases may increase vulnerability to the health effects of air pollution. However, we disagree that environmental justice concerns justify denial of the application for a PSD permit for the Project.

Executive Order 12898 provides that "[t]o the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and

¹¹ These or similar statements were also made by individuals during a meeting Administrator Jackson and Regional Administrator Blumenfeld held with the Central Valley Air Quality Coalition on March 23, 2011, or in correspondence following that meeting.

possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the [Northern] Mariana Islands.” Section 1-101 of Exec. Order 12898, 59 FR 7629 (Feb. 16, 1994). “Federal agencies are required to implement this order consistent with, and to the extent permitted by, existing law.” *Id.* at 7632. EPA has recognized that it is appropriate to consider environmental justice in PSD permitting actions. *See, e.g., In re Prairie State Generating Company*, 13 E.A.D. 1, 123 (EAB 2006); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 174-75 (EAB 1999) (“Knauf I”). Moreover, the opportunity for the public to comment on “alternatives” and “other appropriate considerations” under section 165(a)(2) of the CAA provides EPA with a basis for incorporating environmental justice considerations into PSD permitting decisions in appropriate circumstances. *See, e.g.,* EPA General Counsel Gary Guzy Memorandum: “EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May be Addressed in Permitting.” (Dec. 1, 2000). EPA reads the language in the Executive Order directing federal agencies to identify and address impacts “as appropriate,” and “[t]o the greatest extent practicable and permitted by law,” to afford considerable discretion to the Agency in determining how to address any impacts that we may identify. In addition, since this Executive Order references all of the programs, policies and activities of each federal agency to which it applies, EPA may consider how best to respond to the environmental justice concerns raised in public comments within the larger context of all the actions EPA is taking to reduce environmental hazards in the communities potentially affected by emissions from the Project. EPA also believes it is appropriate to consider actions being taken by state and local government agencies to address these concerns.

In implementing Executive Order 12898, EPA believes it is appropriate for the Agency to consider the best available data that are germane in light of the scope and nature of the action before us in analyzing whether there may be disproportionate adverse impacts on minority communities and low-income communities. *See, e.g., In re: Shell Gulf of Mexico, Inc. and Shell Offshore, Inc.*, OCS Appeal Nos. 10-1 to 10-4, Slip Op. at 80, fn. 87 (EAB December 30, 2010) (“*Shell II*”) (“ . . . the permit issuer must endeavor to include and analyze in its environmental justice analysis available data that are germane to the environmental justice issue raised during the comment period.”) After preparing our analysis based on the best available data, and considering comments received, EPA has not identified disproportionate adverse impacts on minority communities and low-income communities that would result from our proposed PSD permitting action that should affect issuance of this PSD permit, though EPA acknowledges that in light of the limited data available, EPA is not able to reach any definitive conclusion about the specific human health or environmental impacts of short-term NO_x emissions associated with the Project.

Considering the environmental conditions of greatest significance in this region and the range of actions EPA and state and local government agencies are currently taking to reduce the risks these conditions pose to health and welfare in these communities, EPA’s judgment is that, despite some uncertainties and limitations in available data, emissions from this source are unlikely to add significant environmental harms to the local community. EPA has not identified disproportionate adverse impacts on minority communities and low-income communities that should affect issuance of this permit. To the extent such conditions already exist, EPA believes they are more effectively addressed

the Project from demonstrating compliance with the 1-hour NO₂ NAAQS especially egregious.

Response: While we recognize the commenters' concerns regarding the limited NO₂ data available for consideration in our Environmental Justice Analysis, we disagree with the commenters that EPA's decision to grandfather the Project from demonstrating compliance with the NO₂ NAAQS is inappropriate, for the reasons stated in EPA's Supplemental SB for the action and in the responses to comments 1-10 in Section II.B.1.

In this situation where the available data are limited, and where EPA has determined that it is appropriate to grandfather this permit from demonstrating that the source will not cause or contribute to a violation of the 1-hour NO₂ NAAQS, EPA does not read the Executive Order to call for EPA to draw a specific conclusion regarding compliance with the 1-hour NO₂ NAAQS or that we reach a definitive determination that the Project will not result in disproportionate adverse impacts with respect to short-term NO_x emissions. As noted above, in implementing this Executive Order, EPA believes it is appropriate for the Agency to consider the best available data that are germane in light of the scope and nature of the action before us in analyzing whether there may be disproportionate adverse impacts on minority communities and low-income communities. Moreover, the language in the Executive Order directing federal agencies to identify and address impacts "as appropriate," and "[t]o the greatest extent practicable and permitted by law," affords considerable discretion to the Agency in determining how to address any impacts that we may identify in light of uncertainties regarding those impacts. EPA believes that in conducting our Environmental Justice Analysis for the Project, and considering the comments on the analysis, we are appropriately exercising our discretion in implementing the Executive Order in the context of this permit application under the CAA, which does not preclude EPA from approving this PSD permit in the face of uncertainty concerning the impacts of short-term NO_x emissions associated with the Project on the community.

As discussed in the response to comment 23 in Section II.B.1 above, for purposes of Executive Order 12898, EPA has generally recognized that compliance with the applicable NAAQS is an appropriate benchmark to support a determination that EPA's issuance of a PSD permit for a proposed facility will not have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. The commenter is correct that we have not determined whether the Project in this case will comply with the 1-hour NO₂ NAAQS. Therefore, EPA has conducted a separate review of the issue of impacts from short-term emissions of NO_x in our Environmental Justice Analysis. EPA disagrees with the commenters' statements that EPA's Environmental Justice Analysis provides no information upon which to judge the impacts of increased short-term emissions of NO_x on environmental justice communities. The analysis describes what EPA believes is the best available data concerning the impacts of the Project's short-term NO_x emissions in the absence of an approved PSD modeling analysis. However, we recognize that the available data concerning impacts associated with the Project's short-term NO_x emissions are very limited, and concur with the commenter that our analysis is inconclusive in this regard. Nevertheless, we believe that our Environmental Justice Analysis and our consideration of public comments on the Analysis

are appropriate and satisfy the requirements of the Executive Order. In addition, as discussed in Section I.A of this document, emissions from mobile sources account by far for the majority of NO_x emissions in Kings County. Emissions inventory data from ARB indicate that mobile source emissions in 2010 resulted in 25.2 tons per day of NO_x as compared with 2.2 tons per day for all stationary sources combined (the total inventory for 2010, including area sources, was 27.8 tons per day). In comparison, emissions of NO_x from the Project authorized by this permit are limited to 0.395 tons per day.

25. **Comment:** A commenter states that EPA should not move forward with approving the PSD permit for the Project because EPA failed to provide adequate notice of our public hearing, in that our public notice placed information on the hearing date, time and place in the third page of dense text, and because residents of Kettleman City have reported that they did not receive the notice.

Response: EPA believes that the notice we provided of our April 12, 2011 public hearing was adequate and appropriate. EPA not only followed our regulations at 40 CFR 124.10 governing public notice, but we went well beyond those regulatory requirements in providing notice of our recent proposed action on the Project and the related public hearing to ensure that local communities were informed of our proposed action.

The text of EPA's March 2011 public notice itself is consistent with the content requirements at 40 CFR 124.10, none of which specify the placement of necessary information in a particular location within a public notice. EPA also translated the public notice and our Supplemental SB for the action, including the Environmental Justice Analysis, into Spanish.

EPA's methods for notifying interested parties and the public of our recent proposed action and the related public hearing also went well beyond the regulatory requirements for notice at 40 CFR 124.10. EPA published our public notice in English and Spanish in appropriate newspapers, including a Spanish-language newspaper, mailed and emailed the notice to an extensive list of parties consistent with 40 CFR 124.10, and also mailed the notice (in English and Spanish) to every post office box in the City of Avenal and Kettleman City. EPA also posted the public notice and the Supplemental SB on our Region 9 website. Further, EPA mailed and emailed the public notice and the Supplemental SB to the Avenal, Kettleman City and Hanford branches of the Kings County Library, and confirmed with library staff that the information would be displayed for the public.

26. **Comment:** Commenters state that data indicate that emissions from the Project will result in a violation of the 1-hour NO₂ NAAQS and that EPA's EJ analysis must disclose the likelihood of that occurrence. Specifically, the commenters state that EPA has acknowledged an assessment of 1-hour ozone¹² demonstrated that the Project may result in a maximum 1-hour NO₂ impact of 44 ppb. The commenters state that when combined with background levels found throughout California, this additional NO₂ would result in a violation of the 100 ppb standard.

¹² We assume the commenter meant to refer to NO₂ rather than ozone here.

roads have been measured to be 30 to 100% higher than those measured away from major roads. The commenters state that while Kettleman City is adjacent to I-5 and is bisected by a smaller highway, the Hanford and Visalia sites cited in EPA's EJ analysis are many miles from the proposed Project location and several miles from the nearest major highway. The commenters provide a variety of reasons why failing to account for near roadway impacts is likely to be significant, including, for example, truck traffic associated with the nearby Kettleman Hills Hazardous Waste landfill, and they assert that without identifying the likely background levels of NO₂ in Kettleman City, EPA is unable to determine the health impacts associated with the additional NO_x emissions from the Project. Based on the data that EPA did provide and the assumption that NO₂ levels in Kettleman City are 30-100% higher than those in Hanford and Visalia, the commenters assert there is no reasonable basis for believing that Kettleman City or the other communities in the vicinity of the proposed Project would not be disproportionately impacted by NO_x emissions from the plant. Commenters also state that background information from Hanford and Visalia is not representative in this case because Hanford and Visalia do not experience the same level of economic and racial disadvantage as other San Joaquin Valley communities and therefore do not represent the pollution burden borne by more the marginalized communities. Finally, commenters believe that EPA's analysis is contradictory because on one hand, EPA concluded that background levels of 1-hour NO₂ in the area surrounding the site are not disproportionately high compared with communities elsewhere in the State, and on another hand, EPA stated that the nearest monitors to the Project are located outside of the 25-kilometer boundary to determine disproportionate impacts.

Response: EPA believes that the data we cited in our Environmental Justice Analysis concerning short-term NO_x emissions from the Project and NO₂ levels in the area near the Project are the best data available at this time, and therefore appropriate to consider for purposes of our analysis, as discussed in response to comment 24 in Section II.B.1.

While EPA's Environmental Justice Analysis described the limited available data regarding NO₂ levels in the general area near the Project, EPA's analysis did not portray that data as necessarily being representative of the levels in Kettleman City or other local communities, and EPA has insufficient information at this time to determine whether or not it is in fact representative of that area in terms of air quality. EPA's analysis stated simply that "[t]he Agency currently has limited data as to the impacts of NO_x emissions from the Project or existing sources on the communities of interest. As previously discussed, there is limited hourly NO₂ monitoring data in California from EPA-approved monitoring network sites, and the closest monitoring sites are 28 miles and 46 miles from the proposed Project. The limited data indicate that background levels at the monitors closest to the Project are on par with measured levels of NO₂ statewide, and that background levels of 1-hour NO₂ in the general area surrounding the Project are not disproportionately high as compared with communities elsewhere in the State." EPA agrees with the commenters that the social vulnerabilities of the communities nearest the Project differ from those of the communities of Hanford and Visalia, and that the monitoring sites in the latter locations are located more than 25 kilometers from the Project.